STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, SUITE 500
OAKLAND, CA 94612

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November 19, 1992
File No. 1114.17(SIM)

Ms. Helen McKinley, Project Officer
U.S. Environmental Protection Agency, Region IX
Hazardous Waste Division (H-6-3)
75 Hawthorne Street
San Francisco, CA 94105

Dear Ms. McKinley:

Subject: **Quarterly Progress Report for the South Bay MSCA Fiscal Year 92 for the Quarter 1 July - 30 September 1992**

Attached are four copies of the Quarterly Progress Report. The report covers the tasks in the approved Workplan amendments within the grant amendment award of June 5, 1992.

While the current Workplan amends and carries the work through September 1993, the June 1992 award is only through September 1992. An additional grant award is expected early in the federal fiscal year (approximately late January 1993) to complete the workplan.

As before, I would appreciate any constructive comments you may have to assure compliance of and/or improve the usefulness of the report. Please call me (510/286-0304) if you have any questions.

Sincerely,

Steve Morse
MSCA Program Manager

Attachment: Quarterly Progress Report (4)
cc: SRR, LPK, LKB, BHW, SAH, GW, JET, MAB
S. Malos [SWRCB/DCWP (Underground Tanks)]
T. DiSanto[SWRCB/DAS(Budgets), P. Sepeda[SWRCB/DAS(Budgets),
D. Vercruyssen [SWRCB/DAS(Acctg)]

QUARTERLY STATUS REPORT

JULY - SEPTEMBER 1992

SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA)

EPA GRANT NUMBER V-009403-02-9
(as of June 5, 1992)

State Water Resources Control Board

California Regional Water Quality Control Board
San Francisco Bay Region
South Bay Toxics Cleanup Division

November 19, 1992

QUARTERLY PROGRESS REPORT
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT
July - September 1992

The goals of the MSCA for this phase are:

To accelerate cleanup of contaminated groundwater at Superfund sites in the South Bay.

To augment the RWQCB's existing programs to ensure that the EPA's requirements, as defined in the National Contingency Plan (NCP), are met for those NPL sites assigned to the RWQCB as lead agency.

* * *

The South Bay Multi-Site Cooperative Agreement (MSCA), Phase II, was awarded and accepted by the State Water Resources Control Board effective April 13, 1988. This progress report for this phase is submitted to satisfy the Special Conditions. This report covers the July - September 1992 quarter as amended in subsequent grant offers, the latest being awarded June 5, 1992 to extend the agreement to September 30, 1993 with partial awards of June 1992 and, most likely January 1993.

The MSCA Grant provides funding for activities of the state (i.e. State Board and Regional Board) responsible for coordinating and enforcing groundwater cleanup programs at Federal Superfund sites in the South Bay. The estimated expenditures, staff years, and accomplishments are compared to the work plans of January 28, 1988, March 9, 1989, February 13, 1990, January 1991, and January 22, 1992.

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QUARTERLY PROGRESS REPORT
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT
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II - SPECIAL CONDITIONS

Besides the tasks in the MSCA's Workplan, some of the grant's Special Conditions require the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) to perform certain activities. The Revised Special Conditions responded to here are part of the grant offer of June 5, 1992.

An amended Workplan for 1992-1993 for $2.35 million was submitted to and approved by the EPA with a partial award June 5, 1992.

Under the terms of the Special Conditions, the Board requested that EPA redirect funds between several of the sites to cover unanticipated costs not budgeted. EPA has agreed to the redirection and included the redirection in the 1992-1993 grant award. Because the award was later than anticipated, redirection will be needed again. The remaining partial award by EPA is expected late January 1993 for the remainder of the grant through September 1993. This concept was discussed and agreed to in principle at the RWQCB/EPA quarterly status meeting November 9, 1992.

Due to a change in State accounting to allocate all non-site specific charges monthly (to the appropriate NPL sites in proportion to staff activity), the grant workplan non-site specific tasks (A, B, and E.3.) and their accounting records can be misinterpreted. The important indication of budget for this quarterly review is the *total.*

EPA continues to finalize the few remaining MSCA sites for initial demands for cost-recovery started in early March. EPA has to date received significant and substantial payments. EPA and RP negotiations over costs continued as well as additional cost-recovery billing throughout the quarter. A cost-recovery suit against Intel, Kim Cap III (Intel Magnetics site), CTS Printex, and ADN Corp (CTS Printex's property owner).

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III - SUMMARY AND STATUS OF MSCA TASKS AND BUDGETS

This Section provides a summary as well as details where necessary on the quarterly progress and status of the MSCA tasks in the Workplan of January 1992 and as approved via the June 1992 grant award.

To accelerate the cleanup at the South Bay Federal Superfund sites the EPA assigned the responsibility along with the necessary augmented funding to the State and Regional Boards to accomplish oversight and regulation of the South Bay Superfund sites under Federal and State law, regulations and EPA Guidelines.

In most instances the toxics threat and risk at the sites is now either under interim control (awaiting long-term solutions) due to aggressive earlier Board regulation and requirements for initial and interim investigations, removals, and remediation or the Board and EPA have adopted and the Responsible Parties are (or have) constructed and/or implemented the long-term remediation project. The Regional Board's efforts are now focused primarily on the remaining sites requiring completion of any necessary investigations and development of cleanup alternatives (i.e. the RI/FS process) and a proposed cleanup plan (the RAP) for public review and comment (See Table, page III-5). After public review and comment, the Board will adopt the RAP in a Site Cleanup Order (i.e. CAO) as modified by public comment, staff recommendations and Board guidance. If EPA approves of the Board's actions and selects the same remedy (RAP), they will administratively adopt a Record of Decision (ROD). Close coordination with EPA is maintained during the process; there is no reason to believe that EPA would not choose the same remedy as the Board.

Significant Events and Activities During the Grant Quarter:

South Bay MSCA Superfund Site Cleanup Decisions (RI/FS/RAP): All the South Bay Superfund sites have accomplished significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet State and Federal Superfund (all of which the State requires as well) requirements to determine the best alternative considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Board Actions:
July: Allowed IBM to reduce off-site pumping
August: None
September: None

Other MSCA Events/Activities during the Quarter:

Quarterly Enforcement Meeting: Although EPA and the Board met frequently during the quarter, no joint quarterly meeting was held between DHS, EPA, and the Board covering the enforcement status of the South Bay toxics cleanup sites -- both Superfund and non-Superfund. This joint meeting is formalized in the updated South Bay Enforcement Agreement. At this time the primary area where the three agencies interface is the Stanford Industrial Park area in Palo Alto, Rhone-Poulenc in East Palo Alto where the DTSC was previously the lead agency, and at United Heckathorn and Liquid Gold sites in Richmond where the Board is a support agency.

South Bay Groundwater Task Force: Due to low attendance and interest, future meetings have been canceled unless a specific topic or site arises that warrants reconstitution of the task force. Contact with the usual participants of the Task Force is maintained through individual site-specific contacts.

Board staffing: During the quarter, the Board's staffing in support of the MSCA was satisfactory. Because of the attempt to reduce the amount of effort in the Site Management System, the absence of the Information System Technician did not affect the Site Management System. (the published SMS has not been updated since early this year). It is expected to resume the SMS through the use of a computer Bulletin Board System in early 1993. The loss of the Division's Senior Engineering Geologist / Section Leader caused some impacts as the Division Chief attempted to cover her supervisory duties and responsibilities in her absence. Backfill is expected early December. State budget shortfalls did not affect the MSCA staffing, but did affect purchases.

1992-1993 MSCA Workplan: The Regional Board submitted the amended 1992-1993 MSCA Workplan in January; the State Board accepted and applied for the amended grant in March; and the EPA awarded the amended Grant in June. The Workplan is effective through September 30, 1993.

EPA Cost-Recovery: In early March 1992, EPA began the process of cost-recovery for the MSCA sites. The demands are for combined costs of the Board (through June 30, 1991) and EPA (through July 31, 1991). By the end of March, several RPs had already paid, and most of the remaining billed sites paid either in full or partially during the quarter. A cost-recovery suit was filed by EPA against Intel, Kim Camp III, CTS Printex, and ADN. Completion of the initial cost-recovery cycle is expected before the end of the year and the beginning of a new annual cycle is expected to begin next spring.

Status and Funding of MSCA Tasks:

The overall status of the Grant tasks is satisfactory, especially with the new grant supplemental award received June 5, 1992; however, the status of the individual tasks (and site budgets) varies (see the individual tasks following for detailed descriptions):

A. Program Management: Normal activities continue with assuring the final adoption of RAPs at several sites as well as efforts at Rhone-Poulenc to assure that tight time schedules would be met.

B. Site Management System: The last published quarterly report for October - December 91 was distributed late January. With the leave of absence of the Information System Technician from early April to September, the Regional Board's latest approved workplan has rescoped the SMS to be less IST intensive and still provide greater public access (via modem, fax, and limited paper copies). Expected startup of the revised SMS is early 1993.

D. Community Involvement: Up-to-date; see specific item. Considerable community involvement activities continue to be generated at the AMD/Signetics/TRW and National Semiconductor/AMD Arques sites concerning volatilization of contaminants through the soils into residences and school(s) above the off-site plume as well as the extension of the ground water pollutant plume northerly of Highway 101. The biggest community involvement efforts during the quarter concerned the Rhone-Poulenc site in East Palo Alto with the implementation of Remedial Action for the Upland OU in the summer quarter. Work was also significant on an update of the 1989 EPA brochure on "Status of Superfund Groundwater Cleanup in the South Bay".

E2. NPL Site Oversight: Currently, we are able to keep up with the staff work load although some schedules are slipping (e.g. HP 640 Page Mill and HP 1501 Page Mill). The typical scenario finds that as the cleanup tasks in the RI/FS workplan become solidified and finalized that details formerly unknown or unresolved take on an importance not previously appreciated (e.g. HP sites). Some unforseen slippages in the current MSCA schedules have occurred and probably will occur again. State staff will do everything in their power to minimize slippage. Additionally, the utilization of Operable Units is being used (e.g. NSC/AMD Arques) where a firm decision can be made on a given unit *and* a final decision on the remainder of the site can not be made for a considerable time. A review of the site schedule (page III-5) indicates actual and probable slippage from the schedules updated earlier this year for the recent award and last quarter's report. Details on the slippage are covered later by site, but generally they can still be categorized into four categories:

1. Upon review of the PRP submitted RI/FS and proposed RAP, the report and recommendations are inadequate and require significant administrative changes to meet EPA guidance documents; these comments come from both RWQCB and EPA staff [e.g. National Semiconductor/Advanced Micro Devices (Arques)].

2. Finishing up the RI/FS and RAP, "holes" are found in the RI/FS and RAP that must be covered with further field work and/or investigations (e.g. Rhone-Poulenc's risk assessment).

3. New information comes to light (usually in the field, "one last well...") that requires radical changes to the RI/FS and RAP with their ensuing delays (e.g. the HP Palo Alto sites).

4. Agency and public comment require significant amendment of the FS/RAP (e.g. Rhone-Poulenc).

An additional factor that may delay RODs, but probably not the state RAPs is activity by the State Department of Health Services in the preparation of Health Assessments (HA) under contract for the Agency for Toxics Substances and Disease Registry (ATSDR) as required by CERCLA/ SARA. To date, it is still not clear what the difference between ATSDR/DHS' Health Assessments and the Board's BPHE and Risk Assessments is or how they will be involved in RAP/ROD decision-making since the HA will not normally be available until after the Board adopts a RAP. To date, no ROD has been held up because of ATSDR's HA.

Mitigating these potential delays is the fact that the Board has required interim remediation, in almost all cases, the definition work has been mostly completed (exception, but nearing completion -- HP's 640 and 1501 Page Mill sites in Palo Alto), and the Board can implement enforcement quickly where needed. Staff is aware of slippages and is working to assure completion to the amended schedule as well as preventing further slippage. At this time no enforcement is planned.

Over expenditures shown on this task are primarily caused by several administrative problems:

- Within the task, CALSTARS reports utilized currently do not provide an appropriate breakout between indirect costs and contract costs.

- Within the task by site, over expenditures are caused by the implementation of specific site budgets where none existed before and unanticipated work or difficulty of work that could not be foreseen by the original budget. With the new award of June 1992, redirection should correct this problem (by task). For tracking purposes, the overall *total* task and grant budget must be utilized.

- The grant award was late due to delays in the submission and award; earlier over expenditures are now covered by the July 1990 and May 1991 award budgets and will also be partially reconciled with the June 1992 grant award budget redirections. No additional funding is requested at this time, but additional redirections will be necessary with the January 1993 remaining partial award.

- To facilitate cost-recovery, all non-site specific work (Tasks A, B, etc.) is allocated monthly to the MSCA sites in proportion to the site activity for the month. The real test of grant budget and spending at this time is to compare the *total* "bottom line" of the entire grant. State staff are attempting to provide a better picture of individual site budgets in future quarterly reports.

E3. EPA Coordination: This task has been eliminated in the January 1992 amended workplan with all such "EPA coordination" activities being charged to the site that the staff is assigned to regulate or support.

The table on page III-6 is a summary of the grant budget status of all the tasks and shows the approved budget and total estimated expenditures for staffing, expenses and contracts during the quarter and the life of the Cooperative Agreement (Phase II) since initial award April 13, 1988, including the July 90, May 91, and June 92 awards. In previous MSCA quarterly reports we have forecasted that there would be over expenditures on Tasks A, Program Management, and E.3., EPA Coordination. These over-expenditures are from greater than anticipated staff and contractor (i.e. IPA) time necessary for contract preparation for currently non-site specific consultant contracts as well as to comply with federal and state procurement requirements. The Regional Board Program Manager may request a redirection between tasks to cover this underestimate; no overall increase in total budget is foreseen due to these charges at this time. *It should be noted again that the only valid cost data is shown on page III-6 since the State Board accounting system (CALSTARS) has already distributed the non-site specific dollar charges to the specific sites in proportion to site activity. Personnel Years are shown appropriately, but not dollars spent or remaining on the other non-site specific tasks (A, B, some of D, and E.3.)*

Forecasted MSCA Tasks and Activities Next 3 - 6 Months:

--Significant activity is still expected as shown in the MSCA Schedule (see page III-5) to complete

RI/FS (HP 1501), and proposed RAP H/P 1501), and conduct a Board Public Meeting (Rhone Poulenc Wetlands Investigation) and some informal Public Meetings near sites to receive comment on various phases of projects.
--Maintain time schedules in Community Relations Plans in coordination with overall schedule (especially Hexcel and Hewlett-Packard).

--Amend and extend where necessary MSCA contracts (Technical Assistance, Public Health Evaluation) and Interagency Agreement with DHS (Data Validation).

SOUTH BAY MSCA GRANT SCHEDULE REQUIREMENTS

(updated 11/15/92 by RWQCB; changes since last report shown w/#)

Site	RI/FS and RAP Completed and Available for Public Comment		Final RAP/ROD Adopted	
	mo/yr	FFY/Q	mo/yr	FFY/Q
1. Advanced Micro Devices - Arques	*RI/FS adopted; ROD signed; RD/RA underway*			
2. Advanced Micro Devices - Bldg 901/902	*RI/FS adopted; ROD signed; RD/RA underway*			
3. Advanced Micro Devices 915	*RI/FS adopted; ROD signed; RD/RA underway*			
4. Applied Materials				
Groundwater Operable Unit	*RI/FS, RAP adopted; ROD (groundwater) signed; RD/RA underway*			
Soils Operable Unit	2/93#	93/2#	4/93#	93/3#
5. CTS Printex	*RI/FS and RAP adopted; ROD signed; RD/RA underway*			
6. Fairchild, San Jose	*RI/FS and RAP adopted; ROD signed; RD/RA underway*			
7. Hewlett Packard, 1501 Page Mill	4/93#	93/3#	7/93#	93/4
8. Hewlett Packard, 640 Page Mill				
COE Operable Unit	8/93#	93/4#	1/94#	93/2#
Operable Unit #2	N/A?	N/A?	N/A?	N/A?
9. Hexcel	9/92?	92/4?	11/92?	93/1?
10. Intel Magnetics / Micro Storage	*RI/FS adopted; ROD signed; RD/RA underway*			
11. Intel Santa Clara III	*RI/FS & RAP adopted; ROD signed; RD/RA underway*			
12. International Business Machines	*RI/FS and RAP adopted; ROD signed; RD/RA underway*			
13. Intersil / Siemens	*RI/FS and RAP adopted; ROD signed; RD/RA underway*			
14. National Semiconductor				
Operable Unit 1	*RI/FS adopted; ROD signed; RD/RA underway*			
Operable Unit 2	TBD (late 93)#	TBD (late 93)#	TBD (late 93)#	TBD (late 93)#
15. Rhone Poulenc/Sandoz Crop Prot Corp				
Uplands Operable Unit	*RI/FS adopted; ROD signed; RD/RA underway#*			
Wetlands Operable Unit	8/93#	93/4#	11/93#	94/1#
16. Signetics	*RI/FS adopted; ROD signed; RD/RA underway*			
17. Solvent Services	*RI/FS & RAP adopted; ROD signed; RD/RA underway*			
18. Spectra Physics	*RI/FS adopted; ROD signed; RD/RA underway*			
19. Synertek 1	*RI/FS & RAP adopted; ROD signed; RD/RA underway*			
20. Teledyne	*RI/FS adopted; ROD signed; RD/RA underway*			
21. TRW/FEI Microwave	*RI/FS adopted; ROD signed; RD/RA underway*			
22. Van Waters & Rogers	*RI/FS and RAP adopted; ROD signed; RD/RA underway*			

TBD=To Be Determined

Notes: Federal lead sites, for which RWQCB receives funding under MSCA for its support activities, have identical milestones, but are not included here since the RWQCB is not responsible for meeting those time schedules. The State-required RAPs are not adopted until the NBAR is completed; does not affect the Federal Superfund process, only state required Non-Binding Allocation of Responsibility (i.e. NBAR).

SUMMARY OF SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA - PHASE II) TOTAL EXPENDITURES

AS OF END OF THE QUARTER APRIL - SEP 1992

(expenditures on State accounting reports as of 09/30/92 with contracts & equipment expenditures estimated)

TASK TITLE/SITE	PROG MGMT	SMS	EPA COORD	COM INV	TOTAL NON-SITE	NPL SITE TOTALS	GRAND TOTAL MSCA
PCA / TASK CODE	72901	72902	72903	3222/73XX		72XXX	
EPA NPL SITE #	N/A	N/A	N/A	N/A			
SALARY & WAGES:	356,240	72,045	62,680	4,889	495,854	1,149,645	1,645,499
SUB-TOTAL SAL & WGS	356,240	72,045	62,680	4,889	495,854	1,149,645	1,645,499
SALARY BUDGET	331,478	93,685	103,322	63,172	591,657	1,180,761	1,772,418
REMAINING BUDGET	(24,762)	21,640	40,642	58,283	95,803	31,116	126,919
BENEFITS:	106,870	21,616	19,105	1,323	148,914	338,978	487,892
SUB-TOTAL BENEFITS	106,870	21,616	19,105	1,323	148,914	338,978	487,892
BENEFITS BUDGET	99,444	28,105	31,387	19,153	178,089	354,227	532,316
REMAINING BUDGET	(7,426)	6,489	12,282	17,830	29,175	15,249	44,424
INDIRECT COSTS:							
EXP/OBLIG/ENCUM	(443,841)	(86,432)	(68,020)	(6,705)	(604,998)	2,450,176	1,845,178
SUB-TOTAL INDIRECT	(443,841)	(86,432)	(68,020)	(6,705)	(604,998)	2,450,176	1,845,178
INDIRECT BUDGET	342,583	94,364	105,324	228,920	771,191	1,238,363	2,009,554
REMAINING BUDGET	786,424	180,796	173,344	235,625	1,376,189	(1,211,813)	164,376
CONSULTANTS:							
CSDHS - DATA VAL					0	57,294	57,294
BASELN PUB HEALTH					0	328,171	328,171
TECHNICAL ASSIST					0	170,263	170,263
PRP SEARCH					0	29,530	29,530
LABORATORY SVCS					0	25,830	25,830
IPA(S) INC SPECIAL EXPENSES	11,332		5,407	430,572	447,311		447,311
SUB-TOTAL CONTRACT	11,332	0	5,407	430,572	447,311	611,088	1,058,399
CONTRACT BUDGET:	0	0	21,742	487,867	509,609	1,479,323	1,988,932
REMAINING BUDGET	(11,332)	0	16,335	57,295	62,298	868,235	930,533
EQUIPMENT:	4,819			5,478		7,971	
EXPEND/OBLIG/ENCUM	4,819	0		5,478	10,297	7,971	18,268
SUB-TOTAL EQUIPMEN	4819	0		5,478	10,297	7,971	18,268
EQUIPMENT BUDGET	6,350	3,000		11,445	20,795	26,100	46,895
REMAINING BUDGET	1,531	3,000		5,967	10,498	18,129	28,627
GRAND TOTAL EXP/ENC	35,420	7,229	19,172	435,557	497,378	4,557,858	5,055,236
GRAND TOTAL BUDGET	779,855	219,154	261,775	810,557	2,071,341	4,061,567	6,132,908
GRAND TOTAL REMAIN	744,435	211,925	242,603	375,000	1,573,963	(496,291)	1,077,672
% EXPND: BUDGET	5	3	7	54	24	112	82
PYs EXPENDED	7.40	3.19	2.12	0.29	12.99	33.33	46.32
PYs BUDGETED	8.56	4.62	3.43	3.48	20.09	33.91	54.00
REMAIN PYs	1.17	1.43	1.31	3.20	7.11	0.58	7.68
% EXPND: BUDGET PYs	86	69	62	8	65	98	86

11/15/92: JUL-SEP 92 QTR RPT

PROGRAM ELEMENT A: PROGRAM MANAGEMENT

The RWQCB is responsible for continued coordination and implementation of the South Bay MSCA Program. These activities include, but are not limited to, the following:

- *Maintaining the direction, scope, and quality of the South Bay Program*
- *Planning and oversight of the overall program schedule and budget*
- *Interagency coordination*
- *Staffing requirements and recruitment*
- *Supervision of Community Involvement*
- *Program analysis and development*
- *Supervision of procurement*

Product

The products for Task A are the successful completion of all the tasks identified and funded under this phase of the South Bay MSCA. As stated in previous quarterly status reports, an adjustment of funds and PYs from contract dollars in Task E2. to this task (and to Task E3. -- EPA Coordination) may be necessary since charging all of these consultant procurement activities to a specific site is difficult to determine for this work at this time; a specific distribution among all the NPL sites will be made at a later date as the services of the consultants are utilized.

Additionally, most site-file cost-recovery work will be initially charged against this task with allocation among the sites made later depending upon the actual work necessary to establish and maintain individual site-specific cost files.

Within the overall program management, the most significant program management activities during this period involved the coordination / management necessary to meet MSCA time schedules, especially Rhone-Poulenc; the support as necessary for EPA's cost-recovery; and day to day supervision and management of MSCA tasks. Significant activity is expected over the next three months in supervising and implementing the SMS BBS.

State Budgeted Activities

Task A involves supervising and implementing specific tasks (i.e. contracts) included in the MSCA. There is no existing state-funded budget provided for this activity.

Costs

The expenditures for the quarter as well as the grant period through 30 September 1992 are detailed and presented in Table III-A. Estimated expenditures beyond the task budget are for contract costs due to the use of an IPA and as well as additional state staffing to work on procuring contracts under the MSCAs Task E.2. and the establishment of site cost files. Redirection of contract funds from Task E.2. and others (to be eventually distributed by NPL site) to this task is necessary. Note the costs shown already accommodate the distribution of this tasks costs to the site specific accounts. See the Table of page III-6 for overall grant budget status.

TABLE III - A

COST ESTIMATE FOR TASK A - PROGRAM MANAGEMENT
ESTIMATED EXPENDITURES VS. APPROVED BUDGET AND STAFF - PHASE IIA GRANT 13 APRIL 88 - 30 SEP 1992

	APPROVED BUDGET APRIL 1988 - SEP 1992		ESTIMATED EXPENSES THIS QUARTER		TOTAL EXPENDITURES AS OF 30 SEP 1992		ESTIMATED REMAINING CURRENT GRANT	
Personnel	Est. Staff Years	Est. Cost	Est. Staff Years	Est. Cost	Staff Years	Expended	Staff Years	Funds
Supervising WRCE	3.03							
Senior WRCE/Geologist	0.98							
Assoc WRCE/Geologist	1.23							
Accountant I	1.10							
Staff Services Analyst	1.13							
Information Services Technician	0.10							
Office Technician	0.05							
Office Asst II	0.63							
Temporary Help	0.31							
TOTAL	8.56 SY	$331,478	0.25	$17,315	7.40 SY	$356,240	1.16	($24,762)
FRINGE BENEFITS		$99,444		$5,194		$106,870		($7,426)
INDIRECT COSTS		$342,583		($22,423)		($443,841)		$786,424
EQUIPMENT		$6,350		$2,173		$4,819		$1,531
CONTRACTS								
		$0		$0		$11,332		($11,332)
		$0		$0		$0		$0
Total Contracts:		$0		$0		$11,332		($11,332)
TOTAL ESTIMATED RWQCB STAFFING AND COST	8.56 SY	$779,855	0.25 SY	$2,259	7.40 SY	$35,420	1.16 SY	$744,435
			3%	0%	86%	5%	14%	95%

11/15/92: JUL-SEP 92 QTR RPT

PROGRAM ELEMENT B: SITE MANAGEMENT SYSTEM

Task Description

Under the earlier and current MSCA agreements the RWQCB implemented a computerized system to track RI (site remedial investigation), FS (feasibility studies / alternatives evaluation), and the implementation of remedial action activities for use of the RWQCB, CALEPA-DTSC and EPA management personnel for use in site enforcement and task tracking.

Additionally, as part of the community involvement program the SMS is currently distributed to 15 municipal agency representatives, 9 libraries, 7 state and federal agency representatives, 2 environmental groups and a manufacturers group, as well as sold (for reproduction costs) to those desiring it (primarily consultants).

Products

No regular quarterly report was produced this quarter because of the temporary loss of staff to produce the SMS. The Board is reconsidering the future of the SMS, at least in its present form. The 1992-93 workplan supports a significantly reduced SMS effort, at least for the "paper" portion. Regional Board will implement this "new" SMS in early 1993, but this still depends on equipment purchasing and delivery.

State Budgeted Activities

There is no existing State-funded budget or activities for the Site Management System.

Cost

A detailed breakdown on expenditures for Task B is presented in Table III-B. Note the costs shown already accommodate the distribution of this tasks costs to the site specific accounts. See the Table of page III-6 for overall grant budget status. No costs this quarter due to specific staff shortage and awaiting approval of grant and revised SMS task.

TABLE III - B

COST ESTIMATE FOR TASK B - SITE MANAGEMENT SYSTEM
ESTIMATED EXPENDITURES VS. APPROVED BUDGET AND STAFF - PHASE IIA GRANT 13 APRIL 88 - 30 SEP 1992

	APPROVED BUDGET APRIL 1988 - SEP 1992		ESTIMATED EXPENSES THIS QUARTER		TOTAL EXPENDITURES AS OF 30 SEP 1992		ESTIMATED REMAINING CURRENT GRANT	
Personnel	Est. Staff Years	Est. Cost	Est. Staff Years	Est. Cost	Staff Years	Expended	Staff Years	Funds
Supervising WRCE	0.00							
Associate WRCE/Geologist	0.10							
WRCE/Geologist	0.25							
Staff Services Analyst	0.25							
Information Services Technician	2.98							
Office Asst II	0.64							
Temporary Help	0.40							
TOTAL	4.62 SY	$93,685	0.02 SY	$678	3.19 SY	$72,045	1.43	$21,640
FRINGE BENEFITS		$28,103		$204		$21,616		$6,487
INDIRECT COSTS		$94,364		($19,892)		($86,432)		$180,796
EQUIPMENT (See Workplan for details)		$3,000		$0		$0		$3,000
CONTRACTS								
		$0		$0		$0		$0
		$0		$0		$0		$0
Total Contracts:		$0		$0		$0		$0
TOTAL ESTIMATED RWQCB STAFFING AND COST	4.62 SY	$219,152	0.02 SY	($19,010)	3.19 SY	$7,229	1.43 SY	$211,923
			0%	-9%	69%	3%	31%	97%

11/15/92: JUL-SEP 92 QTR RPT

PROGRAM ELEMENT D: COMMUNITY INVOLVEMENT

Task Description and Objectives

The main objectives of community involvement activities performed under the MSCA are:

Provide the general public with information on ground water systems, water supply sources, water quality, hazardous waste regulatory processes, and scope, progress and findings of remedial response activities.

Provide sufficient background information about technical and environmental issues to help the public understand and assess remedial actions.

Provide information, especially technical findings, in a form understandable to the general public.

Provide elected officials and the media with timely detailed information at key points throughout program activities.

Use the media as a major means of disseminating information to the general public.

Establish a two-way information exchange with environmental, public interest, and other concerned groups throughout the remedial response program.

Provide the means for all interested individuals to express concerns and make inquiries throughout project activities. (the opportunity for two-way communication is particularly important because of the length and complexity of the project).

Use the Groundwater Task Force, for overall coordination and review of community involvement efforts.

Create an interagency community involvement team to further coordinate the flow of information from agencies to the public.

Monitor public concerns and information needs

Modify the community involvement plan(s) to respond to changes in community attitudes and needs.

Community involvement activities conducted under the MSCA function independently, but coordinated with, EPA's area wide community involvement strategy as well as DHS's site community involvement programs. Under this approach, EPA assumes the lead role in coordinating area-wide community involvement activities in the South Bay. Specifically, the RWQCB will be responsible for providing information and directing community involvement activities for RWQCB-lead sites.

Products

The following activities were completed during the Quarter, primarily utilizing IPA staffing with student assistance:

1. A community open house on the Rhone Poulenc site was held on June 16, 1992 at the Tulip Jones Womens' Club Building. RWQCB staff and representatives from the company were available to discuss cleanup progress and scheduled future actions with community members. Approximately 20 community members attended.

2. Community Relations staff continued preparation of a report on MSCA activities in the South Bay over the past ten years. Assistance on graphics and page layout is being provided by State Board staff. Two meetings were held with the State Board graphics specialist on charts and diagrams for the report. A meeting was also held with the State Office of Support Services who will provide printing and binding services. Early draft of the report were sent for review and comment.

Task D - Community Involvement (cont.)

3. Community relations staff assisted DHS' EHIB staff in preparing for and conducting a community meeting on indoor air sampling at San Miguel School in Sunnyvale.

4. Quarterly Summaries of cleanup activities at Superfund sites were prepared and distributed to local government officials and company representatives. Separate reports were prepared for sites in each city (Cupertino, Mountain View, Palo Alto, Santa Clara, San Jose, and Sunnyvale.)

5. Community relations staff visited San Jose libraries to resolve concerns over the long-term storage of documents from the Fairchild San Jose and IBM sites.

6. Fact Sheet #4 on the National Semiconductor and AMD Arques sites was mailed on September 17, 1992. It was also distributed at a Lakewood Village Neighborhood Association meeting in October.

7. Community relations staff attend monthly meetings between Hewlett-Packard representatives, and members of the Barron Park Association Foundation (TAG recipients) on the HP 640 Page Mill Road and HP 1501 Page Mill Road sites.

Future Activities

Future activities are currently scheduled to meet the MSCA Special Conditions time line (as revised) requirements. Although the IPA staff was reduced late April with the return of an IPA to EPA, current IPA staffing better matches the forecasted Community Involvement needs. Backup as needed will be provided by Board staff and this may require changing some contract funds to personal services funds at a later date.

Costs

Work on this MSCA task is primarily by contract IPAs with very limited state employee participation. This task accommodates the budget necessary for site-specific NPL Community Involvement programs above and beyond technical (i. e. engineer/geologist) assistance which is already budgeted within the NPL Site Oversight task. A detailed expenditure breakdown for Task D is presented in Table III-D on page III-14. Note the costs shown already accommodate the distribution of this tasks costs to the site specific accounts. See the Table of page III-6 for overall grant budget status.

TABLE III - D

COST ESTIMATE FOR TASK D - COMMUNITY INVOLVEMENT
ESTIMATED EXPENDITURES VS. APPROVED BUDGET AND STAFF - PHASE IIA GRANT 13 APRIL 1988 - 30 SEP 1992

	APPROVED BUDGET APRIL 1988 - SEP 1992		ESTIMATED EXPENSES THIS QUARTER		TOTAL EXPENDITURES AS OF 30 SEP 1992		ESTIMATED REMAINING CURRENT GRANT	
Personnel	Est. Staff Years	Est. Cost	Est. Staff Years	Est. Cost	Staff Years	Expended	Staff Years	Funds
Supervising WRCE	0.00							
Senior WRCE/Geologist	0.00							
WRCE/Geologist	0.00							
Staff Services Analyst	0.25							
Information Services Technician	0.60							
Office Technician	0.03							
Office Asst II	0.75							
Temporary Help	1.85							
TOTAL	3.48 SY	$63,172	0.00 SY	$0	0.29 SY	$4,889	3.19	$58,283
FRINGE BENEFITS		$19,153		$0		$1,323		$17,830
INDIRECT COSTS		$228,920		($6,705)		($6,705)		$235,625
EQUIPMENT (See Workplan for details)		$11,445		$0		$5,478		$5,967
CONTRACTS								
IPA --		$454,417	**	24,621		$430,572		$23,845
SPECIAL EXPENSES		$33,450		$0		$0		$33,450
Total Contracts:		$487,867		$24,621		$430,572		$57,295
TOTAL ESTIMATED RWQCB STAFFING AND COST	3.5 SY	$810,557	0.00 SY	$17,916	0.29 SY	$435,557	3.19 SY	$375,000
			0%	2%	8%	54%	92%	46%

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PROGRAM ELEMENT E: TIER I ACTIVITIES

Tier I activities are those activities that occur at specific sites in the South Bay.

TASK E1.*	IDENTIFICATION OF NEW SITES	TASK E2.	RWQCB OVERSIGHT OF NPL PRP ACTIVITIES
TASK E1a.*	SCREENING OF NEW SITES IN ORDER TO CONDUCT PAs ON MOST SENSITIVE SITES		
TASK E1b.*	OVERSIGHT OF PRP SI		

*Note: These tasks were not requested for funding in this Phase; they may be considered at a later time if conditions changes.

TASK E2. RWQCB OVERSIGHT OF NPL PRP ACTIVITIES

Regional Board activities in this task cover the RI/FS oversight and/or regulation underway at the 31 South Bay MSCA Superfund sites (32 companies/agencies either final and proposed including Hexcel in the Livermore Valley and Liquid Gold and United Heckathorn in Richmond) for which the Board as a regulatory agency has either the current lead (22) or the supporting agency role (9). The current Agency-Lead and NPL Status as of this report are covered below.

EPA Lead Superfund Sites:

*1. Fairchild Semiconductor Corp., 464 Ellis St., Mountain View
*2. Intel Corp., 365 E. Middlefield Rd., Mountain View
3. Jasco Chemical Company, 1710 Villa St., Mountain View
4. Lorentz Barrel and Drum, 1515 S. 10th St., San Jose
5. Moffett Naval Air Station, Sunnyvale
*6. Raytheon Company, 350 Ellis St., Mountain View
7. United Heckathorn, Richmond
8. Westinghouse Electric Corporation, 401 E. Hendy Ave., Sunnyvale

RWQCB Lead Superfund Sites:

*1. Advanced Micro Devices, 901 Thompson Pl, Bldg.901, Sunnyvale
2. Advanced Micro Devices, Bldg. 915., 915 Deguigne Dr., Sunnyvale
*3. AMD-Arques, (formerly Monolithic Memories, Inc.), 1165 East Arques Ave., Sunnyvale
4. Applied Materials, 3050 Bowers Avenue, Santa Clara
5. CTS Printex, 1905-1931 Plymouth St., Mountain View
6. Fairchild Camera and Instrument Corp., Bernal Road, San Jose
7. Hewlett-Packard, 640 Page Mill Rd., Palo Alto
8. Hewlett-Packard, 1501 Page Mill Rd., Palo Alto
9. Hexcel, Livermore
10. Intel Facility III, 2880 Northwestern Parkway, Santa Clara
11. Intel Magnetics/MicroStorage, 3000 Oakmead Village Dr., Santa Clara
12. International Business Machines, Cottle Road, San Jose
*13. Intersil, Inc., and Siemens Components, Inc., Cupertino
*14. National Semiconductor, 2900 Semiconductor Dr., Santa Clara
15. Rhone-Poulenc/Sandoz, 1990 Bay Road, East Palo Alto
*16. Signetics, 811 E. Arques, Sunnyvale
17. Solvent Services, 1022 Berreyessa Road, San Jose
*18. Spectra-Physics, Inc., 1250 West Middlefield Road, Mountain View
19. Synertek #1, Santa Clara
*20. Teledyne Semiconductor, 1300 Terra Bella Ave., Mountain View
*21. TRW Inc., 825 Stewart Pl., Sunnyvale
22. Van Waters & Rogers, Inc., 2256 Junction Ave., San Jose

* above sites will be treated as part of a combined site, at least for off-site work.

Cal/EPA-DTSC Lead Superfund Sites:

1. Liquid Gold, Richmond

EPA NPL Modifications (RCRA "drop" sites):

EPA's proposed rule-making in June 1988, (NPL Update #7) recommended that 6 NPL sites be deleted from the NPL since they are RCRA sites. Two other RCRA sites were proposed to be retained on the NPL. RWQCB officially commented to EPA-HQ on this proposal to delete high-priority RCRA sites by questioning the timeliness of the RCRA regulation update, future MSCA funding for these CERCLA/RCRA sites, and the lack of Technical Assistance Grants to citizen groups for RCRA (only) sites. EPA-IX has stated that the RCRA sites (proposed deleted and those remaining) will be treated as NPL sites to assure attention to cleanup appropriate to their NCP HRS scoring.
On October 4, 1989, EPA announced its final rule on the dropping of some of the NPL sites that are also RCRA sites. Under this rule, the following sites have been dropped from the NPL:

Hewlett-Packard, 1501 Page Mill Road
IBM, San Jose
Rhone Poulenc/Sandoz, East Palo Alto
Signetics, Sunnyvale
Van Waters and Rogers, San Jose

EPA (and the Board), per policy, continue to treat the RCRA "drop" sites the same as NPL sites in terms of requirements, tasks, and cleanup.

Products during Reporting Period:

Regional Board actions / Orders affecting the South Bay MSCA:

July: Authorized IBM to reduce off-site pumping
August: None
September: None

South Bay MSCA Superfund Site Cleanup Decisions (Remedial Investigations/Feasibility Studies/Remedial Action Plan): All the South Bay Superfund sites have performed significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet State and Federal Superfund. (almost all of which the State requires as well) requirements to determine the best alternative cleanup plan considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Board staff conducted the following tasks as detailed in the EPA OSWER Memorandum dated October 1,. 1986, entitled, "CERCLA Funding of Oversight of Potentially Responsible Parties by States at National Priority List Sites. "

Review Tasks (all sites):
--Reviewed and commented on scope of work and work plans (all work plans requested and approved as of August 1990; updating due to operable units still may be necessary)
--Reviewed and commented on updates to Safety Plans
--Reviewed and Commented on drafts of portions of RI reports (all)
--Reviewed/discussed FS objectives
--Completed PRP reports (all)
--Organized and participated in technical meetings on the RI/FS with PRPs, PRP contractors, and/or EPA. (all)
--Provided Technical Support to the Community Relations Task for:
Briefing of local and state officials
Prepared fact sheets and press releases

Field Related Tasks:
--On-site presence/inspection as necessary (all)

In addition, at RWQCB lead sites the following tasks were in progress by RWQCB staff or contracted by the RWQCB:

--Data Validation (all by IAG with DHS)
--Public Health Baseline Evaluation
(all work other than by PRP by contract award to ICF/Clement for both BPHE, BPHE review, and RI/FS review)
--Maintenance of the Administrative Record
(primary use of PRPs for initial preparation)
--Continue Implementation of Cost Recovery
(all)

For those sites where the RWQCB is the Support Agency, staff provided support in the tasks described above to the extent necessary but not to exceed the staffing levels previously approved. (MEW, Lorentz, United Heckathorn, Westinghouse, JASCO, Liquid Gold)

For those sites under Regional Board lead, the IBM, Fairchild San Jose, Applied Materials (groundwater Operable Unit), Intel SCIII, Intersil/Siemens, Solvent Services, AMD 901/902, AMD 915, AMD Arques, CTS Printex, National Semiconductor OU#1, Microstorage/Intel Magnetics, Signetics, Rhone-Poulenc/Sandoz (Uplands OU), TRW/FEI Microwave, Teledyne, Spectra-Physics, Synertek #1, and Van Waters & Rogers, sites have completed the RI/FS and RAP and a ROD has been signed in this MSCA grant phase (See Table, Page III-5).

Costs and Budgets:. Even with the addition of the June 1992 grant award and the budget redirection among sites, some site over-expenditures are forecasted at this time. While no new grant funds will be required, redirection among sites will be necessary as an amendment of the second partial award in January 1993.

The following is a description of the MSCA funded staff work and the current status at each of the MSCA Superfund sites.

REGIONAL BOARD LEAD SUPERFUND SITES:

ADVANCED MICRO DEVICES 901-902, SIGNETICS, TRW (FEI) MICROWAVE (THE COMPANIES)

Activities: July through September 1992: Field activities were completed for quarterly monitoring of all four operable units in early July; results will be summarized for each operable unit, as available, below. Operation of extraction and treatment systems for all four operable units continued throughout the quarter, with minimal interruption. Modifications to the offsite and Signetics extraction system were completed in the third quarter. All treatment systems were in compliance with respective NPDES permit requirements, with the exception of possible violations of effluent limits for inorganics at the AMD 901/902 operable unit.

Acceptable deed restrictions have been completed for AMD, Signetics and TRW operable units. Board staff attended two community meetings, one in July with the Lakewood Village Homeowners Association and one in August organized by the California Department of Health Services, Environmental Health Investigation Branch.

AMD Operable Unit: The groundwater monitor report for the AMD operable unit was submitted in September 1992. No significant trend in groundwater elevations was noted for the shallow water-bearing zones for the third quarter as compared to the previous quarter. The six-well extraction system pumped an estimated 22 gpm during the second quarter of 1992. As expected, the majority of this water was extracted from the B1 and B2 water-bearing zones. Based on the low water levels in the A aquifer, staff has continued discussions with AMD regarding the possibility of beginning vapor extraction in this zone. Several A-zone wells indicated increases in concentration of TCE and 1,2-DCE. However, the significance of these changes is unclear since these wells have been sampled infrequently (not since 1988 in several cases) as a result of low water levels. Increased concentrations of TCE were also noted in samples from the B1 zone. The discharger is evaluating whether these increased contaminant concentrations may be a result of the subsurface disturbance caused by the excavation or as a result of higher water levels in the previous two quarters. Samples from selected wells were analyzed for inorganics. Chromium was above applicable drinking water standards in a single well.

A summary of contaminant removal and extraction system operation through the second quarter was included in the report for the third quarter 1992. Corrections have been included to previous contaminant removal estimates. Based on average contaminant concentrations, the system removed about 46 pounds of VOCs during the first quarter and 25 pounds of VOCs during the second quarter. All remedial actions at the site, including two soil excavations, have resulted in the estimated removal of 404 pounds of VOCs since 1984. The high removal rate for the first quarter is the result of an increase in the concentration of 1,1-DCE in the influent water to the treatment system.

The groundwater system extracted and treated 2,647,100 gallons of water during the second quarter of 1992. As noted above, the treatment system was in violation of the effluent limit for mercury in the initial sample for July. The effluent was resampled and was found to be in compliance. As part of the NPDES permit requirement, the discharger was required to submit a study of "background" concentrations of inorganics in the site groundwater. The intent of this report was to aid in the consideration of alterative effluent limitations for inorganics in the case that background exceeds the limits required by the Board. This report was submitted in September and is being reviewed by Board staff.

Documentation of soil removal and disposal for the AMD 901/902 facility was submitted in late September 1992 and is currently being reviewed by Board staff. The discharger also submitted a proposal for a revised sampling and analysis plan in September. The revision is based, in part, on the completion of the soil excavation and removal. Board staff is reviewing the revised plan.

Final deed restriction language for this operable unit was submitted by AMD and approved in July. However, since AMD is not the property

owner and since it is unclear if the property at 902 Thompson Place was specifically included in the National Priority List nomination, additional time was provided to the actual property owners. The purpose of this time extension is to allow the property owners to research the impact of the deed restriction and the NPL status of the property at 902 Thompson Place.

Signetics Operable Unit: The progress and monitoring report for the second quarter at the Signetics operable unit was submitted in July 1992. Field activities for the third quarter groundwater monitoring report were completed in early July 1992. A meeting was held with Signetics in early September to discuss progress of remediation and completion of modifications of the onsite remedial systems. The final deed restriction language was approved in August, and a deed restriction was recorded in September. Modifications to the extraction system were completed in September and operation and testing began in late September. This implementation included the installation of one more B-zone monitor well than proposed. This well was added based on the logs of other wells, which indicated the presence of a separate B1 sand. This well will be used to monitor the progress of remediation in this zone and can be converted to an extraction well if necessary.

The extraction system removed more than 10,000,000 gallons of water during the second quarter of 1992. The average extraction rate for the second quarter was 89 gallons per minute. The majority of the water extracted is attributable to the B-zone extraction wells and 440 Wolfe building sump. However, the majority of contaminant removal is attributable to the B-zone extraction wells since contaminant concentration is lower in the water captured by the building sump. The treatment system was in compliance with NPDES requirements. This resulted in an estimated removal of 259 pounds of TCE during the second quarter. The groundwater extraction systems have removed more than 14,000 pounds of TCE since 1987. The soil vapor extraction system removed 17 pounds of VOCs during the second quarter of 1992. The vapor extraction system has removed a cumulative 591 pounds since its inception in 1988.

No notable changes in contaminant concentration trends were recorded, though several wells in the area of highest TCE concentration were lower than typical in the second quarter sampling. In addition to analysis for VOCs, 24 wells were analyzed for priority pollutant metals.Selenium was detected above the applicable drinking water standards in several wells, including two "background" wells.

TRW Operable Unit Field activities for the third quarter groundwater monitoring report were completed in July 1992. The progress and monitoring report for the second quarter at the TRW operable unit was submitted in July 1992. The treatment system operated throughout the third quarter with minimal down-time. The revised sample and analysis plan was approved by Board staff in July 1992. Final deed restriction language was approved in July and a deed restriction was recorded in August.

Anomalously high water levels in some A-zone wells were the result of a leaking sanitary sewer line. This accounted for increased rates of groundwater extraction in several A-zone extraction wells during the second quarter. No significant changes in contaminant concentration or distribution were reported for the second quarter. The average extraction rate for the seven extraction points was 18 gallons per minute during the second quarter for a total of 2,936,232 gallons. Based on average contaminant concentrations at the treatment system influent inlet this results in an average removal of 98 pounds of VOCs. The cumulative VOC removal since 1985 is estimated to be over 2000 pounds of VOCs through the second quarter of 1992.

Offsite Operable Unit Field activities for the third quarter groundwater monitoring report were completed in July 1992. The progress and monitoring report for the second quarter for the Offsite operable unit was submitted in July 1992. Soil flux sampling was completed in June and the report was submitted in September. A report on the installation of additional wells in the area north of Highway 101 has been delayed until October 1992. A letter report documenting the completion of six additional extraction wells in the vicinity of Duane Avenue and the piping to move the water to the treatment system was submitted in September.

The area of the contaminant plume within the 1,000 μg/l isopleth continued to decrease, though no significant change in concentration was noted for analytical results from the second quarter sampling. The new groundwater monitor wells

north of Highway 101 were sampled as part of the scheduled sampling event in July and again in August. The results confirm the presence of TCE in the B1 zone, but at concentrations lower than indicated by the Hydropunch sampling. Based on this sampling, TCE occurrence in the B2 zone is either much lower than indicated by Hydropunch sampling or absent.

The extraction and treatment system required significant maintenance during the second quarter and several extraction wells were out of operation at various times. These wells were repaired during the third quarter, and the treatment system operated without interruption during the third quarter. The extraction system removed almost 14,000,000 gallons of water during the second quarter. The estimated removal of VOCs for the second quarter is 125 pounds. The cumulative removal of VOCs is estimated at over 4700 pounds from September 1986 through June 1992.

Board staff attended a meeting of the Lakewood Village Homeowners Association in July to discuss the recent sample results from shallow monitor wells in the area north of Highway 101. The primary concern was potential impact on ground water supplies. The possibility of the need to locate a treatment system in the neighborhood and the importance of notifying Board staff of any backyard wells were also discussed.

The California Department of Health Services, Environmental Health Investigation Branch (DHS/EHIB) held a public meeting in August to discuss the results of indoor air sampling at the San Miguel School. DHS/EHIB presented the results as inconclusive, due to contamination of some samples and some contradictory data in a second round of sampling. Staff's conclusion was that even the worst case scenario (contaminated samples) did not represent a significant health hazard. However, DHS/EHIB may request additional sampling.

Regulatory Events: July - September None

Projected Events: October 1992 - March 1993 A final report on the installation of all the wells installed in the offsite operable unit during the first and second quarters will be submitted in October 1992. Quarterly progress and monitoring reports will be submitted in October for each operable unit. Soil flux samples will be collected in January or February 1993 depending upon weather. An application for renewal of the NPDES discharge permit for the Signetics operable unit will be submitted during the fourth quarter. The final deed restrictions for AMD 901/902 will be recorded during the fourth quarter 1992.

Unresolved Issues: The law suit filed by residents of the offsite area against the dischargers is still pending. Whether groundwater extraction will be required in the area north of Highway 101 is still to be determined. A revised Health Assessment will be completed by DHS/EHIB at some future time incorporating the outcome of the indoor air sampling at the San Miguel School. DHS/EHIB may complete additional indoor air sampling. It is undetermined whether this will result in a revised categorization of the health risk in the offsite area.

ADVANCED MICRO DEVICES, BUILDING 915, 915 DEGUIGNE DRIVE, SUNNYVALE

Current Status: Water levels in the A and B1 water-bearing zones decreased as compared to the previous quarter. This probably reflects seasonal variation from the winter, "wet season" rains. The majority of A-zone wells (7 of 13) were dry at the time quarterly samples were collected. Water levels in the B2-zone again decreased slightly from the previously quarter. This continued decrease in the B2 water levels may be the result of increased rates of groundwater extraction in wells along Duane Avenue.

Operation of the extraction system continued throughout the quarter. While water levels rose in the A aquifer, groundwater extraction from this aquifer was still very limited. The average total extraction rate from eight extraction points was about 63 gpm during this quarter. More than 85% of the water extracted is attributable to extraction from wells completed in the B1 and B2 zones. Since some wells are completed in multiple water-bearing zones, it cannot be determined what portion of the remaining 15% of extracted water is being produced from the A-zone; however, it is probable that it is less than 1% of the total.

Estimates of contaminants removed from the site by the groundwater extraction system have been updated through the second quarter of 1992. The estimate of total of VOCs removed since 1984 by

groundwater extraction is 3666 pounds with 28 pounds removed during the second quarter. This is a slight reduction in removal rate from the first quarter (37 pounds). Contaminant concentrations were unusually high during the first quarter which resulted in the higher removal rate for VOCs.

No notable changes in VOC contaminant levels as compared to historical data occurred in the third quarter sampling. Selected wells were also analyzed for Title 22 metals. Selenium was detected at levels slightly above the MCL in a single well. Selenium is not a site related groundwater contaminant.

A workplan was submitted for the evaluation of alternatives for the capture of groundwater contaminants in the B2 zone. The workplan was verbally approved in early September. Field work including the replacement of the pump in extraction well EW-8, field investigation with CPT to locate possible well locations, and installation of an additional B2 extraction well was completed in September.

A revised site sampling plan was submitted in late September. A deed restriction was recorded for this site in August.

The treatment system was in compliance with NPDES requirements during the third quarter.

Regulatory Events: July - September 1992 Due to the increased concentration of TCE in well 45d, AMD was required, under Board Order 91-101, to submit a workplan to evaluate possible actions to remove the contaminated groundwater from this area and to regain complete capture of the groundwater contaminant plume onsite.

Projected Events: September 1992 through March 1993 Quarterly reports documenting progress will be submitted throughout 1992 and 1993. The impact of upgradient sources on the AMD 915 system will continue to be monitored. A report documenting the completion of activities to address the increased TCE concentration in well EW-8 will be submitted during the fourth quarter of 1992.

Unresolved Issues: None

APPLIED MATERIALS, INC.
3050 BOWERS AVENUE, SANTA CLARA

Site Activity/Accomplishments:

1. Monthly reports (NPDES) are being submitted as required.
   a. On July 15 the analytical results for the air-stripper effluent sample showed the concentration of total VOCs to exceed the discharge limit. The air-stripper reportedly was then rinsed with acid to remove carbonate buildup which restricted the air and water flow through the treatment unit; this was followed by a rinse with tap water. The analysis of a confirmatory sample showed that the discharge was now below the permit limit (as of July 31).
   b. On September 29 we were informed that the air-stripper effluent exceeded the discharge limit, based on the most recent monthly sample analysis. The treatment unit was cleaned by a contractor, and the effluent reportedly was resampled on October 1. The analytical results will be reported to the Board early next week.

2. Outside legal counsel for Applied Materials provided the Board with a Copy of the Deed Restrictions that were filed with the County Recorder's Office.

3. The final report on the most recent soil investigation was provided to the Board on August 15.

Agency (Board) Activity/Events:

1. Staff reviewed each monthly report as received and commented if and as appropriate.

2. Staff received and placed in the public file the copy of the duly recorded deed restrictions for this site.

3. Staff made a cursory review of the soil-investigation report submitted by Applied Materials, and is in the process of compiling formal review comments.

4. Staff contacted several U.S. EPA personnel in Region IX and elsewhere and requested copies of materials dealing with DNAPLs.

Projected Activities: During the next quarter (October - December 1992) staff expects Applied Materials to submit routine monthly NPDES permit reports, and the periodic monitoring report for June-September 1992. Staff anticipates completing the review of the soil investigation report and providing review comments with final consideration of a "no action" soil RAP in early 1993.

CTS PRINTEX, 1905, 1911, 1921, AND 1931 PLYMOUTH STREET, MOUNTAIN VIEW

Current Status: A technical meeting was held between Regional Board staff and CTS and their consultant, Aqua Terra, on July 8, 1992. Topics for this meeting included how the capture zone analysis was developed, and how CTS has demonstrated that the extraction system has been effective. Questions had arisen regarding the modeling used for capture zone analysis after an evaluation report was submitted in early December, pursuant to Board Order 91-081. A discussion of the parameters used, and modeling work that was done during the RI phase helped to clarify the evaluation. It appears that the current extraction system is containing the plume both downgradient laterally and vertically.

CTS has maintained that there may be an upgradient source moving toward the CTS plume. Pursuant to Order No. 91-081, CTS is required to install an additional monitoring well to determine the western boundary of the plume. On July 28, 1992, well 39W was installed at the intersection of Colony and Sierra Vista on a private vacant lot (slightly up and cross gradient of the site). Regional Board staff observed the well installation and walked the perimeter of the CTS site. In a telephone call on September 25, Aqua Terra confirmed that the results of ground water sampling of the new well detected TCE at 39 ppb, and 1,1-DCA below MCLs. Earlier Hydropunch data showed 47 ppb TCE at the same location. RB staff may need to investigate upgradient TCE sources.

Groundwater extraction systems continued operation and a report made by telephone for the third quarter 1992 groundwater monitoring indicated there was no significant change in the water table from the previous quarter. Chemical concentrations also showed no appreciable changes from the previous quarter. The groundwater status report is due October 15, 1992.

Projected Activities for Next Six Months:
1) The Report on results of installation and sampling of Well 39W is due October 15, 1992.
2) Regional Board staff will develop strategy for investigating possible upgradient sources.

FAIRCHILD, SAN JOSE

Current Status: The final Remedial Action Plan (RAP) was adopted by the Regional Board in January 1989. The RAP set cleanup standards for on-site groundwaters at MCLs and for off-site groundwaters at less than one fourth the MCLs. In order to help meet these cleanup standards, soil cleanup goals were set for the on-site area, which is surrounded by a slurry wall. The Regional Board amended the RAP in May 1990 in response to soil-cleanup issues raised during an appeal. This modification allowed Fairchild to demonstrate that its prior soil cleanup was sufficient to protect groundwater. Fairchild would return water to the on-site aquifers and see whether chemicals remaining in the soil leached out. RAP modifications do not change the groundwater cleanup standards, but rather the methods used to achieve those standards.

Fairchild proposed three further modifications to its remedial program in September 1991: (i) a new on-site extraction well, (ii) cyclic groundwater pumping on-site (one month on, two months off), and (iii) a one-year shut-down of the off-site extraction wells. Board staff approved all three. The first two modifications, implemented in late 1991, are intended to enhance the efficiency of the on-site remedial actions. The third modification, implemented in December 1991, is based on computer modeling which shows that groundwater pumping is ineffective in speeding up remediation of the aquifers at this site. This model predicts that off-site cleanup will take 15 years, whether or not off-site pumping occurs.

During the last quarter, Fairchild operated the on-site extraction system for one month (July), discharging the treated groundwater to the storm drain. (Pumping rates averaged 50 gpm in July, with a total of 15 pounds of VOCs removed during that period). This is consistent with the cyclic pumping plan cited above. The off-site extraction wells were shut down as part of the approved one-year demonstration project. On-site groundwater data suggest that VOC concentrations are declining but that cleanup goals are still exceeded in the area near the

former underground tank. Fairchild requested and the Board approved a continuation of the cyclic pumping program, with a final report due in January 1994.

Projected Activities: During the next six months, Fairchild will continue its cyclic pumping program on-site. The one-year study of no off-site groundwater pumping will end in December 1992, with a written report due two months later. Board staff will review the new model and decide whether to extend the no-pumping period after the one-year shutdown. The 5-year review for this site is due January 1994.

HEWLETT-PACKARD,
640 PAGE MILL ROAD, PALO ALTO

Current Status: An RI/FS was submitted on April 1, 1991, for both on-site and off-site areas in the California, Olive and Emerson Streets (COE) area. The RI/FS was considered not complete due to the discovery of a more complex hydrogeologic environment than first predicted in Matadero Creek area. Additional data has been gathered at the site and future data will be gathered to complete the information required for a resubmittal of the RI/FS.

On-site excavation of contaminated soils needed for construction and demolition of old structures has been completed. Twelve off-site and on-site groundwater extraction wells have been installed as part of the Interim Remedial Measure program at the site. These wells will be connected to a treatment system in the near future.
The final Baseline Public Health Evaluation was completed in September 1992 by Clement International for the on- and off-site areas.

Future Activities: The RI/FS will not be completed until at least February 1993. Additional groundwater extraction wells above what has been approved will be required in the future. Further work to define the edge of the plume on the east side of Matadero Creek will begin in the next quarter. In addition, monitoring wells will be installed in key locations in and around the contaminated area to begin long term monitoring of the contaminants in the groundwater.

Construction on the new building at the 640 property will begin this quarter. The construction will incorporate installation of groundwater and vapor extraction wells in the foundation during construction.

Final definition of the contaminated area extent will continue through the next quarter.

HEWLETT-PACKARD,
1501 PAGE MILL ROAD, PALO ALTO

Current Status: Site Cleanup Requirements were adopted in June 1991 establishing RI/FS tasks and schedules. The RI/FS was originally due in June of 1991, however, due to the discoveries of additional chemical plumes and due to the need for further definition of the known plumes, this date has been informally extended by Board staff. HP submitted a new RI in April, 1992 which is currently under review by Board staff.

The site has installed three interim remedial extraction wells in September. These wells will make a total of six extraction wells at the site. The additional extraction wells will capture the area of the northwest TCE plume with the highest chemical concentrations. The full extent of this plume off-site is still not fully known at this time.

Definition of the boundary of the main plume is fairly well understood in the deep zones but more definition is needed in the shallow zone. Additional work has been done to define the plume on the south side of the 1501 buildings where wells from other site investigations provide the needed information for fairly complete characterization. Preliminary data indicates that there may be a source on the south side.

The Feasibility Study was submitted in June and is under review. The Baseline Public Health Evaluation was submitted this last quarter and is currently being evaluated by Clement International Corporation for the Regional Board.

Future Activities: Hewlett Packard is scheduled to finalize the Baseline Public Health Evaluation. A response to the RI will be given to HP by the end of this quarter and Hewlett Packard may be proposing additional investigation/ remediation work. Additional off-site work in the northwest is going to be continuing during this next quarter. This data will help define the outer extent of the plume.

HEXCEL MANUFACTURING PLANT AND THE ABANDONED DISPOSAL SITE, LIVERMORE

Discharger Activities for the Third Quarter, 1992 - Hexcel submitted in early September draft chemical isoconcentration maps for groundwater. The maps depict chemical contours of dissolved metals, BTXE and solvents regularly found in quarterly sampling. The maps will help finalize EPA's risk assessment for the two site's soil and groundwater pollution.

Hexcel submitted a proposal to reduce sampling frequency at both the manufacturing plant and the abandoned disposal site. Pollutants are not found regularly in all but two wells at the abandoned disposal site and are found in only about half of the wells at the manufacturing plant. The request solicited reductions in sampling frequencies and/or methodologies. Normally, at least a full year of monitoring data is necessary before the groundwater monitoring schedule can be modified.

Board Staff Activities for the Third Quarter, 1992 - Staff commented on the abandoned disposal site draft remedial investigation report. Hexcel responded with an entire revised remedial investigation report that was mailed to the interested parties. Staff commented on the draft chemical isoconcentration maps for the two operable units. Revisions to the maps and final copies will be submitted to the EPA and included in the finalized remedial investigation report. The proposed modified groundwater sampling program was commented on by staff and was found acceptable for groundwater sampling beginning in April, 1993.

Discharger Activities for the Fourth Quarter, 1992 - Hexcel will continue with the concurrent quarterly groundwater monitoring for the manufacturing plant and disposal site. Hexcel will complete the methane gas monitoring at the disposal site when access along the railroad right-of-way is obtained. Hexcel will be submitting results of TCLP analyses from excavated soil and debris generated at the manufacturing plant during plant expansion. The analyses are required for proper disposal of the debris.

Board Staff Activities for the Fourth Quarter, 1992 - Staff anticipates receiving the risk assessment from the EPA and will begin work on an amended site cleanup order to adopt the remedial action plan. It is anticipated that the RI report, feasibility study and risk assessment for both the manufacturing plant and the disposal site, will generate community interest in the sites and at least one community meeting will be held during this quarter. Staff anticipates finalizing a draft record of decision during this quarter and opening the public comment period for the remedial action plan (RAP).

Discharger Activities for the First Quarter, 1993 - Hexcel will be finalizing proposed remedial alternatives, based on public and agency comments, for the two operable units.

Board Staff Activities for the First Quarter, 1993 - Staff will be submitting to the Board and to the EPA Region IX headquarters for consideration of adoption of the RAP. It is anticipated that at least one community meeting may take place during this quarter.

INTERNATIONAL BUSINESS MACHINES, SAN JOSE

Current Status: The final Remedial Action Plan (RAP) was adopted by the Regional Board in October 1988. It set cleanup standards similar to those for Fairchild (San Jose) and included soil vapor extraction (on-site) and continued groundwater extraction (on and off-site). IBM's cleanup program is strongly affected by groundwater elevations, which vary dramatically depending on rainfall as well as recharge by the Santa Clara Valley Water District.

During the last quarter, IBM continued implementation of the RAP. All on-site extracted groundwater was reused, by reinjection, landscape irrigation, or as feed water for industrial use. The soil vapor extraction system was particularly effective, removing 6,000 pounds of VOCs and hydrocarbons from on-site soils in August.

In July, the Regional Board passed a resolution allowing IBM to reduce off-site pumping rates by about 60%, from a total of 375 gpm to 150 gpm. IBM proposed the reduction in response to the Santa Clara Valley Water District's early 1992 suspension of groundwater recharge. The proposal is based on computer modelling which predicts no migration of the chemical plume with reduced pumping. IBM will monitor the results of less pumping and evaluate the results after

one year. The reduction will save 120 million gallons of water per year.

Future Activities: During the next six months, IBM will continue its cleanup program. Efforts to reuse off-site extracted groundwater will be postponed, pending results of the one-year reduction and a determination of the optimal pumping rate. A proposal to re-use IBM's off-site pumpage at the Shea Homes development has been tabled, due to the reduced pumping rate and Shea's time schedule for securing water. A proposal for direct re-use via the Snell pipeline is on hold for now, due to concerns expressed by state DHS and the Santa Clara Valley Water District. The 5-year review for IBM's cleanup program is due in October 1993.

INTEL, SANTA CLARA III, SANTA CLARA

Current Status: The Final RAP for the site was adopted by the Board in July 1990. Intel submitted a report titled "Cyclic Pumping Demonstration Project, Evaluation and Evaluation Recommendations for Further Actions" in late 1991. Cyclic pumping (also known as pulsed pumping) is believed to be a method for improving groundwater remediation efficiencies.

Based on the October 1991 report, a 60-day on/60-day off cycle does not appear to be an efficient substitution for continuous pumping. As a result, after discussions with Board Staff, Intel initiated a 120-day off cycle to determine whether a longer off cycle will allow a greater quantity of VOCs to desorb into the groundwater and result in a higher concentration of VOCs in the extracted groundwater. The 120-day off cycle began in January 1992 and ended in May 1992, at which time Board staff collected a split sample of the extracted groundwater when the extraction well pumps were turned back on. A report on the effectiveness of the 120-day cyclic pumping demonstration project was submitted in lieu of the second quarter monitoring report on July, 31, 1992. Board Staff are scheduled to meet with Intel to discuss the results of the demonstration project in early October 1992.

Future Activities: On-site groundwater extraction and treatment continues as part of the final remedial action at the site. Currently, approximately 30,000 gallons per day of groundwater is extracted and treated to remove volatile organic chemicals. Board staff will continue to monitor the site and review quarterly reports submitted by Intel.

INTEL MAGNETICS/MICRO STORAGE, SANTA CLARA

Current Status: The Final Remedial Action Plan (RAP) for the site was adopted by the Board in July 1991. Board staff transmitted a letter in late 1991, to the potentially responsible parties (PRPs) regarding their compliance with tasks contained in the RAP. Based on the PRPs evaluation of the interim hydraulic control system, Board staff required the PRPs to explain how the downgradient portion of the plume will be remediated. The PRPs submitted, in the first quarter of 1992, an evaluation of the downgradient portion of the plume and alternatives for dealing with the uncaptured portion of the plume. Board staff reviewed the evaluation, and in an August 21, 1992 letter, informed the PRPs that additional remediation at the leading edge of the plume is not necessary at this time. In addition, the PRPs' monitoring program was modified to relieve the PRPs of responsibility for monitoring three wells on the neighboring Metropolitan Corporate Center Property where it has been shown that contamination is separate from and not commingling with the MS/IM plume.

Draft deed restrictions to prohibit the use of the shallow groundwater at the site have been submitted by the two property owners. Kim Camp III submitted a revised draft in February 1992. Board staff sent a letter in April 1992 requesting additional modifications of the proposed deed restriction. Kim Camp III is due to submit another revision in the fourth quarter 1992.

Intel (on behalf of the property owner, 3000 Oakmead Village Drive Ltd.) submitted a revised deed restriction, dated November 7, 1991, for the 3000 Oakmead Village Drive property. Staff transmitted comments to Intel in early March 1992 and additional comments were sent October 1, 1992. Intel's resubmittal of the draft deed restriction is expected in the fourth quarter 1992.

In addition to draft deed restriction review, Board staff work scheduled for completion in the next six months includes attempting to find additional information on the chemical use history of possible upgradient pollution sources.

Future Activities: Currently, approximately 11,000 gallons per day of groundwater is extracted and treated to remove volatile organic chemicals. Board staff will continue to monitor the site and review quarterly reports submitted by the PRPs.

NATIONAL SEMICONDUCTOR CORPORATION (NSC) & ADVANCED MICRO DEVICES (ARQUES) (formerly Monolithic Memories), SUNNYVALE & SANTA CLARA

At the NSC and AMD sites, work completed and work projected is pursuant to the final Remedial Action Plan (RAP) adopted by the Board at its September 1991 meeting. The RAP contains compliance tasks and time schedules for the remediation of soil and groundwater in Operable Unit 1, which consists of the NSC and AMD facilities and the downgradient commingled plume area.

Toward the end of the quarter, staff have begun to focus on OU2 sites (sites which have contributed to groundwater contamination west of the OU1 contaminant plume). There is some concern that contamination from OU1, particularly the United Technologies site, has contributed to the OU2 groundwater plume. It is probable that OU1 sites may be named in draft site cleanup requirements that will be made available for public review late in the fourth quarter 1992.

National Semiconductor The Regional Board and National Semiconductor continued to negotiate the terms of the deed restriction during the third quarter 1992. National Semiconductor has agreed to submit the fourth draft of the deed restriction in mid-October. Regional Board staff anticipate that the fourth draft of the deed restriction will be acceptable and implemented within 60 days of approval pursuant to the RAP. Hewlett-Packard and the Shahinian Trust have also submitted draft deed restrictions, which were reviewed by Board staff. The final drafts for the Hewlett Packard and Shahinian Trust sites will be modeled after the final deed restriction for the NSC property.

Regional Board staff reviewed and approved the addendum to the proposed soil vapor extraction workplan (submitted in June 1992). The workplan provided for further soil contaminant definition and remediation utilizing a number of vapor extraction wells. Seven soil vapor extraction wells were installed in two source areas. Initial removal rates are not yet available for all wells; however, preliminary testing demonstrated a VOC removal rate of 4.5 pounds per day.

NPDES monitoring reports for the second quarter of 1992 have been submitted and reviewed. Effluent limitations for the NSC treatment system discharge have been met. The quarterly groundwater monitoring report for the third quarter has not yet been submitted. During the second quarter, the groundwater extraction and treatment system continued to operate at the site, extracting approximately 158 gallons per minute, and removed a total of 155 pounds of VOCs.

Advanced Micro Devices - Arques site The deed restriction for the Advanced Micro Devices site was finalized and recorded during the third quarter of 1992. The document restricts use of the contaminated groundwater and activities on the property which may impair water quality.

The soil vapor extraction workplan, which provided for the installation of seven vapor extraction wells, was reviewed and approved by Regional Board staff. Start-up of the soil vapor extraction system is pending issuance of permit from the BAAQMD. The soil excavation workplan has also been reviewed and found acceptable by Board staff. The soil excavation workplan provides for removal of soil which cannot be remediated by utilizing soil vapor extraction.

During the quarter, AMD submitted a report evaluating the performance of the expanded groundwater extraction system. Staff will review the report during the next quarter.

Groundwater monitoring reports and NPDES monitoring reports for the second quarter of 1992 have been submitted and reviewed. Operational data for the third quarter have not yet been submitted. The groundwater extraction and treatment system continues to operate. During the second quarter the system extracted approximately 21 gallons per minute and removed a total of 14.4 pounds of VOCs.

RHONE-POULENC/SANDOZ CROP PROTECTION, EAST PALO ALTO

Activities During July-September: Full scale remediation of the Upland OU is in progress. Both in-situ and ex-situ soil treatment is being

conducted. When soil treatment is completed, grading and capping of the areas will occur.

Agency review of the draft Ecological Assessment has been ongoing. Comments from agencies were forwarded to RPI in August. Possibly more comments from EPA may be submitted. Because of a lengthy review and complexity of comments, the schedule for submittal of a final draft will be revised. The revised date shall be approximately December, depending on further agency comment.

Activities Anticipated October-December: Full scale remediation of the Upland OU is expected to continue through November. Agency personnel will have a presence on-site, observing operations and splitting samples of treated soil with RPI to confirm results and evaluate attainment of cleanup standards.

Several agency meetings are anticipated in order to review draft responses from RPI on comments submitted by agencies in regard to the Ecological Assessment. A final draft Ecological Assessment should be submitted to agencies before the end of the year.

Regional Board staff will draft an amended Tentative Site Cleanup Order revising submittal dates for the Ecological Assessment as well as reports dependent on this report. This Tentative Order is scheduled before the Board at the October meeting for adoption.

SIEMENS/INTERSIL, CUPERTINO

Current Status: The final Remedial Action Plan for this site was adopted by the Regional Board in August 1990, and EPA issued a concurring ROD. The RAP calls for additional groundwater extraction wells and soil vapor extraction wells. All work needed to implement the RAP has been completed. With the addition of the new wells, Intersil has 7 soil vapor wells and 7 groundwater extraction wells; Siemens has 16 soil vapor wells and 18 groundwater wells; and offsite there are 3 extraction wells. Additional treatment facilities for groundwater and soil vapor have been installed. The final off-site groundwater extraction system as proposed in the RAP has been completed.

In April 1992, Siemens/Intersil requested permission to close four deep-aquifer monitoring wells off-site, in order to avoid possible damage due to construction activities. Board staff approved the request on June 4, 1992, given that no VOCs were detected in these wells. Shortly afterward, the City of Santa Clara reported PCE concentrations slightly over drinking water standards in a down-gradient public well.

During the last quarter, monitoring and remediation continued as required by the RAP. Siemens closed three on-site wells that were not in use. One additional well was installed. Continued monitoring has confirmed the presence of PCE in the Santa Clara Well #24. The source is not believed to be Siemens/Intersil.

Intersil/Siemens performed an analysis of how altering the pumping rate in the off-site B zone would affect the concentrations in the C zone.

Future Activities: Monitoring and remediation will continue. Board staff may assist the City of Santa Clara in investigating other potential sources of PCE.

SOLVENT SERVICE, SAN JOSE

Activities: July - September 1992 Operation of the extraction and treatment system, including the steam enhanced vapor extraction system (SIVE), continued throughout the quarter. All of the SIVE wells were rehabilitated by the removal of silt during the second quarter. Through the end of June the SIVE system removed a total of 70,300 pounds of VOCs.

A SIVE well within the containment area for the tank which failed was sampled following the June acid spill. Initial results from this well indicated elevated levels of inorganics. This well was resampled in July and again indicated elevated levels of inorganic constituents. Response to the request for additional information was submitted in late September. Additional groundwater samples were collected from well R-1 and a downgradient well. The results of these wells indicate that levels of inorganics have declined to levels that are representative of site background concentrations.

Regulatory Events: July - September 1992 Board staff requested clarification of several items regarding an acid spill that occurred at the site. The request, made under Board authority, also required additional sampling of wells that might have been impacted by the spill.

Projected Events: October 1992 - March 1993
Quarterly monitoring reports will be submitted within thirty days of the end of each calendar quarter. Site construction activities have been delayed by the spill that occurred in June and in obtaining permits from the City of San Jose to construct. The temporary shutdown and evaluation of the SIVE system will also be delayed accordingly. Completion of the destruction of several groundwater monitor wells will be completed during the fourth quarter. Capping and other site construction activities are planned for the fourth quarter, but will probably be delayed by pending permits until early 1993.

Wells that may have been impacted by the June acid spill will be resampled during the fourth quarter.

Unresolved Issues: Necessary access to the property neighboring Solvent Service for the remediation of the BTXE plume has been delayed. This is a result of the current property owner being in financial default.

SYNERTEK #1, SANTA CLARA

Current Status: The Final RAP for the site was adopted by the Board in March 1991. Operation of the B zone groundwater reinjection system commenced in December 1991. The reinjection system consists of two extraction wells pumping a combined total of six gallons per minute (gpm) and one reinjection well reinjecting six gpm. The four A zone extraction wells continue to pump at a combined rate of about 12 gpm.

Board staff commented, in late 1991, on two addenda to the groundwater reinjection plan submitted on behalf of Honeywell as Synertek's owner. The addenda concerned sampling and analysis requirements relative to the new ion exchange treatment system and a reinjection monitoring program. Staff required Honeywell to submit: (1) fish toxicity results of the ion exchange reject water, (2) results of a six month hydraulic control study relative to the reinjection program (due August 15, 1992), and (3) a reinjection system operation and water quality report in future Quarterly Monitoring Reports. Staff will review these submittals as they become available.

Preliminary fish toxicity data indicates that the backflush water from the ion exchange system is a source of toxicity in the extraction and treatment system. A mixing tank has been installed to eliminate the toxicity caused by the backwash effluent. The six month hydraulic control study has been delayed due to the reinjection system failing and becoming non-operational as a result of calcium carbonate precipitating out of the water and clogging the system. The study should be complete in March or April of 1993.

Future Activities: Groundwater extraction and treatment continues as an integral part of the final remedial action at the site. Currently, approximately 26,000 gallons per day of groundwater is extracted and treated to remove volatile organic chemicals. Board staff will continue to monitor the site and review quarterly reports submitted by Honeywell.

TELEDYNE AND SPECTRA-PHYSICS, MOUNTAIN VIEW

Current Status: In February of 1991 the Board adopted a final Remedial Action Plan (RAP) and EPA issued a Record of Decision. The RAP calls for groundwater extraction off-site and at the Teledyne facility. The RAP also requires additional soil treatment at the Spectra Physics facility.

During the past quarter, the on-site soil vapor extraction system was tested and results were submitted in the Effectiveness Report. Other on-site work includes the continuation of groundwater monitoring, effluent monitoring, extraction and treatment.

Off-site, Teledyne/Spectra-Physics has installed two additional monitoring wells north of Charleston Road, and two monitoring wells in this area were converted to extraction wells.

Off-site work associated with finalizing the revised Non-Binding Allocation of Responsibility (NBAR) includes activities at three sites. The sites actively pursuing investigations include Coastside Nursery, Montwood, and Alta. The Space Park Way site is the only site that requires new investigation. Additional off-site groundwater extraction wells are currently being installed in the northwest corner of the plume to remove contamination that, until May 1991, was removed by the City of Mountain View Landfill groundwater extraction system.

The owners of the Alta site submitted a Phase III Site Characterization Report in September 1992. This investigation found some elevated VOC concentrations and must further define and capture contaminants in the northern contamination area. Additional investigation is needed off-site.

Board staff requested site investigation by the owners of Coastside Nursery in September 1992. Results will be submitted in October. The Montwood site has just submitted a report titled "Subsurface Chemical Distribution Report" in August 1992. Ground Water monitoring results were submitted for the Santa Clara County Transportation Agency, North Coach Division.

Future Activities: The NBAR process will continue as each of the downgradient PRPs perform individual site investigations. Regional Board staff may use enforcement orders to require some investigation. It is expected that site investigations will start at another site (Space Park Way). The Montwood site is expected to further characterize and sample the area downgradient of their site. The groundwater cleanup zone comprising the North Bayshore Extraction System will be reevaluated because of the installation of extraction wells in the northwest corner of the plume and the shut-down of the groundwater extraction trench at the City of Mountain View Landfill.

VAN WATERS & ROGERS, INC, SAN JOSE

Current Status: On August 13, 1992, RB staff issued an approval letter to VW&R for the Preliminary Design for the Expanded Groundwater Treatment System and a Preliminary Design for In-Situ Vapor Extraction System. Pursuant to Order 91-138, the final designs for these systems must be submitted by no later than October 15, 1992.

Recording of the deed restriction on the shallow aquifer beneath the site was completed August 13 1992.

The preliminary third quarter 1992 groundwater sampling indicated variability in chemical concentrations in some wells from the previous two quarters. VW&R has reported an upgrading of the extraction system, including replacing pumps in some extraction wells. Water levels have, in general, declined, except for mounding in the vicinity of Well 15 in the A aquifer. VW&R believes that changing chemical concentrations are due to the system being turned off and on, and that the mounding effect will dissipate after the system upgrade is completed.

Projected Activities: The Final Design of ISVE and expanded GW Extraction System is due October 15, 1992. Implementation of the systems will be required within 180 days of approval of the final design.

CALIFORNIA EPA – DEPARTMENT OF TOXICS SUBSTANCES CONTROL LEAD SITE:

LIQUID GOLD, RICHMOND

Current Status: Regional Board staff reviewed draft Feasibilty Study Report and submitted comments to DTSC on July 27, 1992. DTSC compiled Regional Board comments with those of other oversite agencies and issued them to SPTCo on September 25, 1992. In general, comments from Regional Board staff related to application of ARARS to ground and surface waters (Basin Plan, Resolutions 68-16 and 88-63), and Chapter 15, Discharge of Wastes to Land. Comments from other agencies noted incomplete evaluation of some remedial alternatives, other ARAR issues, and unsubstantiated conclusions regarding effects of the site on the adjacent tidal marsh.

Based on a telephone report of groundwater data for this quarter, no significant changes have occurred in water table elevation or chemical concentrations. MW 4, 11, 12, and 13 were purged dry before all samples could be taken. Oil and Grease was again detected at 10 ppm or below in wells MW 3, 7R, 17, and 18 this quarter. The groundwater status report is due October 15, 1992.

Future Activities (continued next page):

Future Activities:

1) The Final FS Report incorporating agencies' comments is required by October 23, 1992. Meetings may be scheduled in October to discuss response to agencies' comments on FS.

2) DTSC has projected the following timeline for the site:

- Approve RI/FS Report by October 30, 1992
- SPTCo prepares Administrative Record; completed by February, 1993
- Public Meeting/Comment Period March - April, 1993
- RAP completed by May 30, 1993

EPA LEAD SUPERFUND SITES:

JASCO, MOUNTAIN VIEW

Current Status: EPA approved Jasco's RI/FS and treatability study on May 21, 1992. EPA issued a proposed cleanup plan in early June 1992; the plan calls for expanded groundwater extraction, treatment prior to POTW discharge, deed restriction prohibiting wells in shallow groundwater, and ex-situ bioremediation of soils. A public meeting and public comment period was held in June 1992.

During the last quarter, cleanup activities continued at this site, including groundwater monitoring and groundwater extraction for interim remediation. Regional Board staff commented on EPA's proposed cleanup plan in July 1992. EPA issued the ROD for this site in September, making essentially no changes in the proposed cleanup plan.

Future Activities: During the next six months, EPA will prepare an enforcement order to require implementation of the approved cleanup plan. Jasco is unwilling to participate in a consent decree process due to cost. EPA will also prepare a RD/RA workplan during this period. The implementation schedule will reflect the fact that Jasco's site will probably be redeveloped for residential use within the next several years.

LORENTZ BARREL AND DRUM, SAN JOSE

Activities: July - September 1992: The discharger submitted initial reports for NPDES compliance and shallow groundwater monitoring during this quarter. The site was in compliance with NPDES requirements. Board staff reviewed the groundwater monitoring report. Since comments were minimal, Board staff provided comments verbally to EPA staff.

Regulatory Events: July - September 1992 None

Projected Events: October 1992 through March 1993 Quarterly NPDES and groundwater monitoring reports will be submitted throughout the next year. Additional monitor well(s) will be installed to assess the possible impact of the SJSU production well on the C zone gradient and to serve as an "early warning" for contaminant migration. Some site structure may be removed and additional soil remedial activity is under consideration.

Unresolved Issues: The need for additional investigation or removal of onsite sumps and other possible areas of contaminated soils is still under considered.

MIDDLEFIELD-ELLIS-WHISMAN SITES, MOUNTAIN VIEW

EPA adopted a cleanup plan for the MEW area in June 1989. In mid-1991, EPA and two of the companies-- Intel and Raytheon--signed a consent decree covering implementation of final cleanup activities; it received court approval in April 1992. EPA issued a unilateral enforcement order to Fairchild and several minor dischargers in November 1990. Fairchild challenged EPA's ROD revision (which changed cleanup goals to standards) and other aspects of the negotiation process. A federal court dismissed the challenge, but Fairchild is appealing the decision. Various responsible parties at this site have begun submitting RD/RA reports in response to the unilateral order or the consent decree. Design work for the remedial measures is in progress.

During the last quarter, a consultant to the companies submitted reports on reuse of

extracted groundwater and on the destruction of potential conduits (abandoned wells). EPA and the Navy began dispute resolution over investigation and cleanup activities at Moffett Field, which affects off-site cleanup efforts by the MEW companies.

NAVAL AIR STATION, MOFFETT FIELD (DOD FACILITY / EPA LEAD)

As of March 1, 1992, oversight responsibility for this site was transferred to another Regional Board division, which will be reporting through the DoD federal facilities agreement.

UNITED HECKATHORN, (aka: LEVIN METALS), RICHMOND

Current Status: The PRPs for United Heckathorn have recently agreed to complete removal of stockpiled DDT-contaminated upland soils. The soils will be disposed of at a Nevada Hazardous Waste Facility.

ATSDR recently completed residential soil sampling for organochlorines near the site. Preliminary results indicated that levels of organochlorines in air and soil are not a public health concern.

Future Activities:
1) The Final RI/FS is expected in October 1992.
2) The Final report on Richmond Harbor benthic studies is expected in October. This report will recommend cleanup levels for sediments in Lauritzen Canal.

WESTINGHOUSE, SUNNYVALE

Current Status: The Record of Decision for this EPA lead site was signed on October 16, 1991. EPA reached agreement with Westinghouse to start remedial design in February 1992.

EPA and Westinghouse failed to reach agreement for a Consent Decree for final remedial action. Instead, EPA will issue a unilateral order that compels Westinghouse to perform the full-scale cleanup plan currently in design. Based on the final remedial design workplan, design continued this quarter and remained on schedule. Field investigation, including installation and sampling of on-site and off-site monitoring wells, was completed during the third quarter. Soil excavation design will be completed during the fourth quarter CY 1992.

Westinghouse had intended to file an NPDES permit application during the third quarter for the discharge of treated, extracted groundwater. However, while preparing this application, it was discovered that no storm sewer connection currently exists in the area of the proposed pilot treatment system. Thus, completion of the application will be delayed while Westinghouse and the City of Sunnyvale resolve this issue. In the meantime, no delay in pilot system startup is expected, since the initial discharge will go to the sanitary sewer.

STATUS OF REGIONAL BOARD MSCA SUPPORT CONTRACTS

DATA VALIDATION (INTERAGENCY AGREEMENT W/CSDHS)

The data validation agreement calls for the California Department of Health Services (DHS) to conduct data validation on analytical data from selected groundwater samples for eighteen Superfund sites. To date, DHS has reviewed 36 data validation packages from MSCA sites (most sites have undergone at least two rounds of data validation).

As the data validation agreement expired at the end of the first quarter 1992, Board staff, over the coming six months, will consider the need to extend the agreement.

BASELINE PUBLIC HEALTH EVALUATION CONTRACT (W/ICF CLEMENT)

ICF Clement continues to review BPHE and risk assessments submitted for Regional Board-lead sites. Currently they are involved in HP 1501 and HP 395 sites.

TECHNICAL ASSISTANCE CONTRACT

Preparation of a new contract and the bidding process is anticipated to begin later this year.

SUPERFUND LABORATORY CONTRACT

Pacific Environmental Laboratories (PEL) was the winning bidder for a Superfund Lab contract that runs from January 1, 1992 to June 30, 1993. The contract budget of $65,000 allows Board staff to submit split samples of groundwater and soils to PEL as a check on PRP generated data.

TABLE III - E2

COST ESTIMATE FOR TASK E2 - NPL OVERSIGHT
ESTIMATED EXPENDITURES VS. APPROVED BUDGET AND STAFF - PHASE IIA GRANT 13 APRIL 1988 - 30 SEP 1992

	APPROVED BUDGET APRIL 1988 - SEP 1992		ESTIMATED EXPENSES THIS QUARTER		TOTAL EXPENDITURES AS OF 30 SEP 1992		ESTIMATED REMAINING CURRENT GRANT	
Personnel	Est. Staff Years	Est. Cost	Est. Staff Years	Est. Cost	Staff Years	Expended	Staff Years	Funds
Supervising WRCE	0.59							
Senior WRCE/Geologist	4.26							
Assoc WRCE/Geologist	20.48							
WRCE/Engr Geol/ES III	1.65							
Staff Services Analyst	0.89							
Accountant I	1.50							
Office Technician	0.28							
Office Asst II	2.05							
Temporary Help	2.22							
TOTAL	33.92 SY	$1,180,761	1.98 SY	$66,028	33.33 SY	$1,149,645	0.59	$31,116
FRINGE BENEFITS		$354,219		$23,481		$338,978		$15,241
INDIRECT COSTS		$1,238,382		$116,612		$2,450,176		($1,211,794)
EQUIPMENT (See Workplan for details)		$26,100		$3,291		$7,971		$18,129
CONTRACTS								
IPA		$171,000						$171,000
CONSULTANT CONTRACTS		$1,308,323		$21,971		$611,088		$697,235
Total Contracts:		$1,479,323		$21,971		$611,088		$868,235
TOTAL ESTIMATED RWQCB STAFFING AND COST	33.92 SY	$4,061,567	1.98 SY	$231,383	33.33 SY	$4,557,858	0.59 SY	($496,291)
			6%	6%	98%	112%	2%	-12%

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Table III.2A SUMMARY OF SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA - PHASE II) TOTAL EXPENDITURES

AS OF END OF THE QUARTER APRIL - SEP 1992

(expenditures on State accounting reports as of 09/30/92 with contracts & equipment expenditures estimated)

TASK TITLE/SITE	AMD-901	AMD-915	APP MTL	CTS PRI	FAIR-MV	FAIR-SJ	HP1501	HP-640	IBM	INT-M	INT III	INT MAG	INTERSIL	JASCO	LORENTZ	MOFFET	AMD/MMI
PCA / TASK CODE	72004	72005	72008	72099	72034	72036	72050	72051	72056	72059	72061	72062	72064	72207	72071	72079	72080
EPA NPL SITE #	82	H1	83	H5	62	84	85	H9	40	86	88	87	J2	F6	89	C7	90
SALARY & WAGES:	35,859	26,269	90,559	26,545	6,242	26,009	36,276	95,911	51,100	7,156	37,040	43,779	25,810	1,760	17,624	0	58,820
SUB-TOTAL SAL & WGS	35,859	26,269	90,559	26,545	6,242	26,009	36,276	95,911	51,100	7,156	37,040	43,779	25,810	1,760	17,624	0	58,820
SALARY BUDGET	21,256	22,844	32,730	16,891	6496	16,258	34,258	38,629	14,505	6496	19,251	22,896	20,678	7,543	9,362	1,888	30,389
REMAINING BUDGET	(14,603)	(3,425)	(57,829)	(9,654)	254	(9,751)	(2,018)	(57,282)	(36,595)	(660)	(17,789)	(20,883)	(5,132)	5,783	(8,262)	1,888	(28,431)
BENEFITS:	10,087	7,885	28,968	7,529	1,873	7,805	10,883	28,756	14,983	2,145	11,110	13,133	7,741	528	5,287	0	17,648
SUB-TOTAL BENEFITS	10,087	7,885	28,968	7,529	1,873	7,805	10,883	28,756	14,983	2,145	11,110	13,133	7,741	528	5,287	0	17,648
BENEFITS BUDGET	6,378	5,958	9,820	5,068	3,030	4,879	10,278	11,588	4,352	1,949	5,775	6,868	6,203	2,263	2,809	566	9,116
REMAINING BUDGET	(3,709)	(1,927)	(19,148)	(2,461)	1,157	(2,926)	(605)	(17,168)	(10,631)	(196)	(5,335)	(6,265)	(1,538)	1,735	(2,478)	566	(8,532)
INDIRECT COSTS:																	
EXP/OBLIG/ENCUM	94,073	71,599	225,971	110,239	13,524	88,676	113,026	236,274	117,865	15,899	92,781	124,323	103,208	8,540	40,172	0	166,739
SUB-TOTAL INDIRECT	94,073	71,599	225,971	110,239	13,524	88,676	113,026	236,274	117,865	15,899	92,781	124,323	103,208	8,540	40,172	0	166,739
INDIRECT BUDGET	23,182	25,104	35,669	19,009	7,069	17,652	39,422	49,164	15,649	7,049	21,056	25,166	22,207	8,280	10,392	2,166	34,336
REMAINING BUDGET	(70,891)	(46,495)	(190,302)	(91,230)	(6,455)	(71,024)	(73,604)	(187,110)	(102,216)	(8,850)	(71,725)	(99,157)	(81,002)	(260)	(29,780)	2,166	(132,403)
CONSULTANTS:																	
CSDHS - DATA VAL																	
BASELN PUB HEALTH																	
TECHNICAL ASSIST																	
PRP SEARCH																	
LABORATORY SVCS																	
IPA(S) INC SPECIAL EXPENSES	23,203	14,922	16,978	21,799	947	8,959	23,661	25,981	8,504	1,112	15,800	14,867	18,757	443	1,546	0	19,691
SUB-TOTAL CONTRACT	23,203	14,922	16,978	21,799	947	8,959	23,661	25,981	8,504	1,112	15,800	14,867	18,757	443	1,546	0	19,691
CONTRACT BUDGET:	18,829	34,532	28,687	4,667	0	13,955	74,436	75,827	10,462	0	19,250	29,451	13,358	0	0	0	52,421
REMAINING BUDGET	(4,374)	19,610	11,709	(17,132)	(947)	4,996	50,775	49,846	1,958	(1,112)	3,450	14,584	(5,399)	(443)	(1,546)		32,730
EQUIPMENT:	399	398	399	399	0	399	399	399	399	0	399	399	399	0	0	0	399
EXPEND/OBLIG/ENCUM	399	398	399	399	0	399	399	399	399	0	399	399	399	0	0	0	399
SUB-TOTAL EQUIPMEN	399	398	399	399	0	399	399	399	399	0	399	399	399	0	0	0	399
EQUIPMENT BUDGET	777	740	1,062	526	134	714	496	701	714	134	720	740	693	334	334	0	506
REMAINING BUDGET	378	342	663	127	134	315	97	302	315	134	321	341	294	0	0	0	107
GRAND TOTAL EXP/ENC	125,485	100,092	309,072	139,229	19,827	117,446	144,747	346,980	164,016	23,687	132,597	175,598	125,485	10,217	57,804	0	227,819
GRAND TOTAL BUDGET	157,528	130,184	201,148	151,844	48,408	85,513	171,248	321,558	71,058	38,408	118,452	170,899	118,346	38,591	38,408	4,620	126,768
GRAND TOTAL REMAIN	32,043	30,092	(107,924)	12,615	28,581	(31,933)	26,501	(25,422)	(92,958)	14,721	(14,145)	(4,699)	(7,139)	28,374	(19,396)	4,620	(101,051)
% EXPND: BUDGET	80	77	154	92	41	137	85	108	231	62	112	103	106	26	150	0	180
PYs EXPENDED	0.987	0.757	2.13	0.38	0.174	0.94	1.23	3.00	1.71	0.53	1.09	1.21	0.597	0.03	0.488	1.19	1.64
PYs BUDGETED	0.63	0.66	0.69	0.52	0.23	0.49	0.88	1.02	0.45	0.23	0.51	0.59	0.63	0.25	0.30	0.08	0.96
REMAIN PYs	(0.36)	(0.08)	(1.44)	0.14	0.06	(0.45)	(0.35)	(1.98)	(1.26)	(0.30)	(0.58)	(0.62)	0.03	0.22	(0.19)	(1.11)	(0.68)
% EXPND: BUDGET PYs	157	111	309	73	76	192	140	294	380	230	214	206	95	12	163	0	171

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Table III.2B

SUMMARY OF SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA - PHASE II) TOTAL EXPENDITURES

AS OF END OF THE QUARTER APRIL - SEP 1992

(expenditures on State accounting reports as of 09/30/92 with contracts & equipment expenditures estimated)

TASK TITLE/SITE	NAT SEMI	RAYTHEON	SIEMENS	SIGNETICS	SOLVENT	SPECTRA	SYNERTEK	TELEDYNE	FEI/TRW	VW&R	W'HOUSE	RP/ZANDOZ	HEXCEL	UNI HECKA	NPL SITE TOTALS
PCA / TASK CODE	72084	72102	72110	72114	72118	72120	72124	72128	72125	72137	72141	72148	72270	72272	72XXX
EPA NPL SITE #	91	93	J2	91	J9	J1	K3	95	K4	96	97	98	J1		
SALARY & WAGES:	88,668	5,233	26,214	34,816	56,552	35,356	27,744	37,678	29,507	48,061	10,682	100,918	58,474	2984	1,149,645
SUB-TOTAL SAL & WGS	88,668	5,233	26,214	34,816	56,552	35,356	27,744	37,678	29,507	48,061	10,682	100,918	58,474	2,984	1,149,645
SALARY BUDGET	37,890	36,421	21,768	32,586	36,255	35,167	38,475	34,180	34,977	40,933	13,275	45,880	57,380	10,724	1,180,761
REMAINING BUDGET	(50,778)	31,188	(4,448)	(2,230)	(20,297)	(189)	10,731	(3,498)	5,470	(7,128)	2,593	(55,038)	(1,094)	7,740	31,116
BENEFITS:	26,600	1,750	8,196	10,446	12,404	10,605	8,325	11,304	8,853	14,421	3,203	30,275	15,339	896	338,978
SUB-TOTAL BENEFITS	26,600	1,750	8,196	10,446	12,404	10,605	8,325	11,304	8,853	14,421	3,203	30,275	15,339	896	338,978
BENEFITS BUDGET	11,367	10,927	6,530	9,776	10,876	10,550	11,543	10,255	10,493	12,280	3,983	13,764	17,213	3217	354,227
REMAINING BUDGET	(15,233)	9,177	53,938	(670)	(1,528)	(55)	3,218	(1,049)	1,640	(2,141)	780	(16,511)	1,874	2,321	15,249
INDIRECT COSTS:															
EXP/OBLIG/ENCUM	235,922	11,753	78,418	98,492	116,009	96,833	76,428	103,787	93,864	158,791	21,554	222,131	118,544	5829	2,450,176
SUB-TOTAL INDIRECT	235,922	11,753	78,418	98,492	116,009	96,833	76,428	103,787	93,864	158,791	21,554	222,131	118,544	5,829	2,450,176
INDIRECT BUDGET	42,983	41,817	23,441	36,027	39,327	38,659	42,662	38,258	38,705	45,092	14,828	52,009	65,858	12,316	1,238,363
REMAINING BUDGET	(192,939)	30,064	(42,391)	(62,465)	(76,682)	(58,174)	(33,766)	(65,529)	(55,159)	(113,699)	(8,726)	(170,122)	(52,686)	6,487	(1,211,813)
CONSULTANTS:															
CSDHS - DATA VAL															57,294
BASELN PUB HEALTH															328,171
TECHNICAL ASSIST															170,263
PRP SEARCH															29,530
LABORATORY SVCS															25,830
IPA(S) INC SPECIAL EXPENSES	17,444	941	22,717	21,782	23,429	15,714	15,826	16,189	21,571	21,012	1,953	18,528	15,537	758	
SUB-TOTAL CONTRACT	17,444	941	22,717	21,782	23,429	15,714	15,826	16,189	21,571	21,012	1,953	18,528	15,537	758	611,088
CONTRACT BUDGET:	52,296	0	14,586	27,881	27,380	19,823	19,204	47,063	29,517	33,887	0	30,468	72,816	0	1,479,323
REMAINING BUDGET	34,852	(941)	(8,132)	6,099	3,951	4,109	3,378	30,874	7,946	12,875	(1,953)	11,940	57,279	(758)	868,235
EQUIPMENT:	399	0		399	399	399	399	399	399	399	0	0	0	0	7,971
EXPEND/OBLIG/ENCUM	399	0		399	399	399	399	399	399	399	0	0	0	0	7,971
SUB-TOTAL EQUIPMEN	399	0		399	399	399	399	399	399	399	0	0	0	0	7,971
EQUIPMENT BUDGET	506	334	793	777	1,106	883	783	839	788	780	334	134	200	200	26,100
REMAINING BUDGET	107	0		378	707	484	384	440	389	381	0	0	200	200	18,129
GRAND TOTAL EXP/ENC	340,430	15,846	105,751	132,664	164,591	131,316	107,339	138,769	127,340	207,974	32,011	330,596	175,561	10,306	4,557,858
GRAND TOTAL BUDGET	256,433	28,408	118,346	125,380	164,154	162,354	127,045	157,952	165,091	206,905	38,408	309,495	188,905	19,710	4,061,567
GRAND TOTAL REMAIN	(83,997)	12,562	12,595	(7,284)	(437)	31,038	19,706	19,183	37,751	(1,069)	6,397	(21,101)	13,344	9,404	(496,291)
% EXPND: BUDGET	133	56	89	106	100	81	84	88	77	101	83	107	93	0	112
PYs EXPENDED	2.77	0.34	0.63	0.72	1.34	0.73	0.66	1.09	0.79	1.25	0.28	3.09	1.43	0.13	33.33
PYs BUDGETED	1.19	0.95	0.70	0.94	1.08	1.01	1.04	0.99	1.01	1.21	0.40	1.21	0.97	0.36	33.91
REMAIN PYs	(1.58)	0.61	0.08	0.22	(0.25)	0.28	0.38	(0.10)	0.22	(0.04)	0.12	(1.88)	(0.46)	0.23	0.58
% EXPND: BUDGET PYs	233	36	89	77	124	72	63	110	78	103	70	255	147	36	98

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TASK E. 3. EPA COORDINATION

Task Description

This task includes the RWQCB staff tasks and contracts of a non-site specific nature necessary to support the MSCA. This task covers those meetings, conferences, telephone calls, and written correspondence between RWQCB and EPA, and RWQCB staff and the public and other agencies for coordination of NPL non-site-specific activities and data; RWQCB (and IPA) staff attendance at training and seminars to familiarize themselves with the EPA RI/FS process and SARA implementation; and RWQCB staff (and IPA) staff time keeping and other tasks necessary to meet the MSCA Special Conditions. Some of the non-site specific consultant contract preparation have also been partially charged here as they involved EPA coordination.

Products

Products for this task include meetings, conferences, training received, telephone calls, and written correspondence between the RWQCB and EPA staff, RWQCB staff and RP/PRP, RWQCB staff and the public and agencies, regarding NPL non-site-specific activities to include follow-up to previously submitted completed work (e. g. PAs, reports, etc.).

State-Budgeted Activities

The required level of consultant contracting, time keeping and communications between the RWQCB, EPA staff, the RP/PRP, public and public agencies are for purposes directly related to the MSCA and are thus not included in State-funded activities. The familiarization with the RI/FS process and the NCP referred to in this subtask relates only to the MSCA requirements. Activities under this task are necessitated by the MSCA.

Cost

A detailed breakdown of expenditures for this task is presented in Table III-E3. Previous expenditure over-runs were due to necessary work on contract procurement activities. Redirection to cover this Task over-run may be necessary and will be covered jointly with Project Management redirection in a separate transmittal.

Additionally, staff guidance has been amended to attempt to apply all future time charges for application to a specific site where reasonable, e.g. when a staff person is only working on several sites and EPA coordination covers activities applicable to all the sites, staff will distribute their time appropriately among the sites they are working on to simplify site cost recovery. As of the January 1992 Workplan, this task has been eliminated so that all staff costs are directly applied to the sites they are working on. The costs shown already accommodate the distribution of this tasks costs to the site specific accounts. See the Table of page III-6 for overall grant budget status.

TABLE III - E3

COST ESTIMATE FOR TASK E3 - EPA COORDINATION
ESTIMATED EXPENDITURES VS. APPROVED BUDGET AND STAFF - PHASE IIA GRANT 13 APRIL 88 - 30 SEP 1992

	APPROVED BUDGET APRIL 1988 - SEP 1992		ESTIMATED EXPENSES THIS QUARTER		TOTAL EXPENDITURES AS OF SEP 30 1992		ESTIMATED REMAINING CURRENT GRANT	
Personnel	Est. Staff Years	Est. Cost	Est. Staff Years	Est. Cost	Staff Years	Expended	Staff Years	Funds
Supervising WRCE	0.00							
Senior WRCE/Geologist	0.55							
Assoc. WRCE/Geologist	1.60							
Staff Services Analyst	0.35							
Information Services Technician	0.00							
Office Asst II	0.46							
Temporary Help	0.48							
TOTAL	3.44 SY	$103,322	0.07 SY	$1,137	2.11 SY	$62,680	1.33 SY	$40,642
NET SALARY								
FRINGE BENEFITS								
Calculated at 30 percent of personnel costs		$31,387		$341		$19,105		$12,282
INDIRECT COSTS		$105,324		($1,478)		($68,020)		$173,344
EQUIPMENT - (See Workplan for details)		$0		$0		$0		$0
CONTRACTS								
IPA		$21,742		$0		$5,407		$16,335
SEE DETAIL SHEET ATTACHED -- n/a		$0		$0		$0		$0
Total Contracts:		$21,742		$0		$5,407		$16,335
TOTAL ESTIMATED RWQCB STAFFING AND COST	3.44 SY	$261,774	0.07 SY	$0	2.11 SY	$19,172	1.33 SY	$242,602
			2%	0%	61%	7%	39%	93%

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